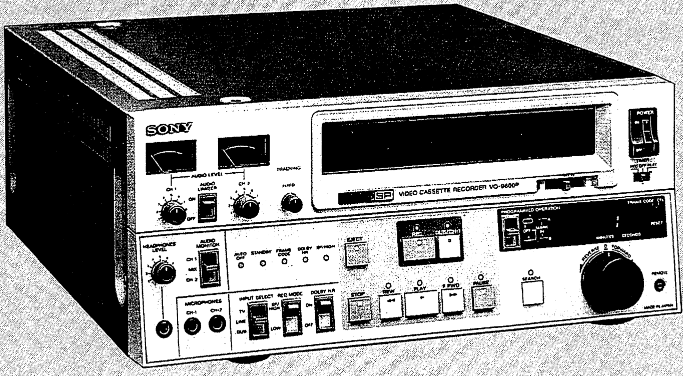
U-matic SP

VIDEOCASSETTE RECORDER

VO-9600P

VOL-2


SONY
VIDEO CASSETTE RECORDER VO-9600P
AUDIO LEVEL
TRACKING
POWER
EJECT
STOP
REW
PLAY
F FWD
PAUSE
SEARCH
HEADPHONES LEVEL
AUDIO MONITOR
MICROPHONES
INPUT SELECT
REC MODE
DOLBY NR

SONY

SERVICE MANUAL

SPECIFICATIONS

System

Recording system	Rotary 2-head helical scan Luminance: fm recording Color signal: converted subcarrier direct recording
Video signal system	CCIR standards, PAL color

Video

Inputs	VIDEO IN (BNC type) ×1 1.0 Vp-p ±0.3 Vp-p, 75 ohms, unbalanced sync negative DUB IN (7-pin) ×1 TV (8-pin) ×1
Outputs	VIDEO OUT 1, 2 (BNC type) ×1 each 1.0 Vp-p ±0.2 Vp-p, 75 ohms, unbalanced sync negative DUB OUT (7-pin) ×1 TV (8-pin) ×1
Horizontal resolution	SP mode recording: 300 lines (both B/W and color) High-band recording: 260 lines (both B/W and color) Low-band recording: 250 lines (both B/W and color)
S/N	Color: more than 46 dB Luminance (Y): more than 48 dB
Sync signal input	SYNC IN (BNC type) ×1 2.5 Vp-p (2 to 5 Vp-p), 75 ohms, unbalanced RF OUT (OFF TAPE) ×1 0.5 (0.3 to 1.0) ±0.1 Vp-p, 75 ohms, unbalanced
Recording level control	Automatic

Audio

Inputs	AUDIO LINE IN CH-1/L, CH-2/R (XLR 3-pin female) ×1 each +4 dB, 10 k ohms, balanced MICROPHONE CH-1/L, CH-2/R (phone jack) ×1 each −60 dB, 3 k ohms, unbalanced TV (8-pin) ×1
Outputs	AUDIO LINE OUT CH-1/L, CH-2/R (XLR 3-pin male) ×1 each +4 dB (at 600 ohm load), balanced AUDIO MONITOR (phono jack) ×1 −5 dB (at 47 k ohm load) TV (8 pin) ×1 HEADPHONES (stereo phone jack) For 8-ohm headphones Level adjustable (from −26 to −46 dB)
S/N	With Dolby NR off 52 dB (KSP, KSP-S tapes) 50 dB (KCA, KCS tapes) (both channel 1 and 2 at 3% distortion)
Frequency response	50 to 15,000Hz (both audio channel 1 and 2 with Dolby NR off)
Recording level control	Manual or limiter selectable

Other functions

Memory backup of programmed operation	3 years from shipment
Pause	A still picture is obtained with long pause function
Search	Still, 1/30 to 5 times normal speed in both forward and reverse directions With RM-580 and RM-500: picture serach with 8 times normal speed (both KSP and KSP-S tapes)
Tracking control	Possible
Skew control	Possible
Sync system	Automatic switching between internal and external
Dropout compensator	Built-in

Tape transport

Tape speed	95.3 mm/sec.
Recording and playback time	Approx. 60 minutes (with KSP-60)
Fast forward and rewind time	Within 4 minutes (with KSP-60)
Wow and flutter	Less than ±0.23% p-p (DIN)
Tape compatibility	U-matic video cassette tapes
Usable tapes	KSP, KSP-S, KCA, KCS type

General

Power requirements	198 - 264 V AC, 48 - 64 Hz
Power consumption	70 W (with the RM-580 and RFK-634)
Operating position	Horizontal
Storage temperature	−20°C to +60°C (−4°F to +140°F)
Operating temperature	5°C to 40°C (41°F to 104°F)
Dimensions	424 × 192 × 492 mM (w/h/d) ($16\frac{3}{4} \times 7\frac{5}{8} \times 19\frac{3}{8}$ inches) including projecting parts and controls
Weight	Approx. 18 kg (39 lb 11 oz)
Supplied accessories	Operating instructions (1) RF modulator compartment cover (1) AC power cord (1)

Optional accessories

BKU-701 computer interface board
FCG-700 frame code generator
RX-707 auto search control unit (for RS-232C interface)
RX-353CE, RX-303CE auto search control unit (for 33-pin interface)
RM-690 remote control unit (for REMOTE connector)
RM-580, RM-500 remote control unit (for 33-pin interface)
RFK-660UCE/660UB/660UF/660CH RF kit
RMM-507 rack mount kit
RM-555 multi remote control unit

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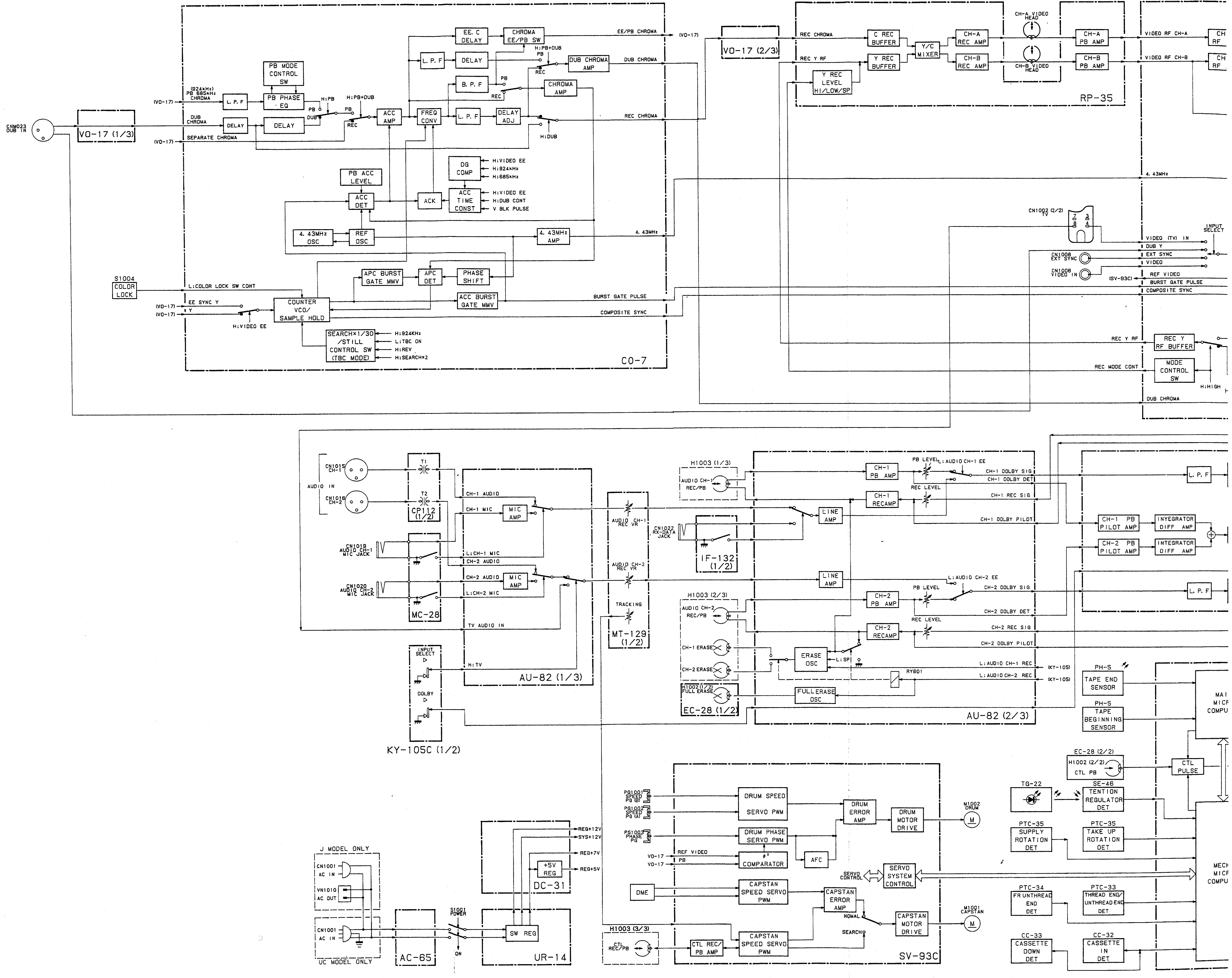
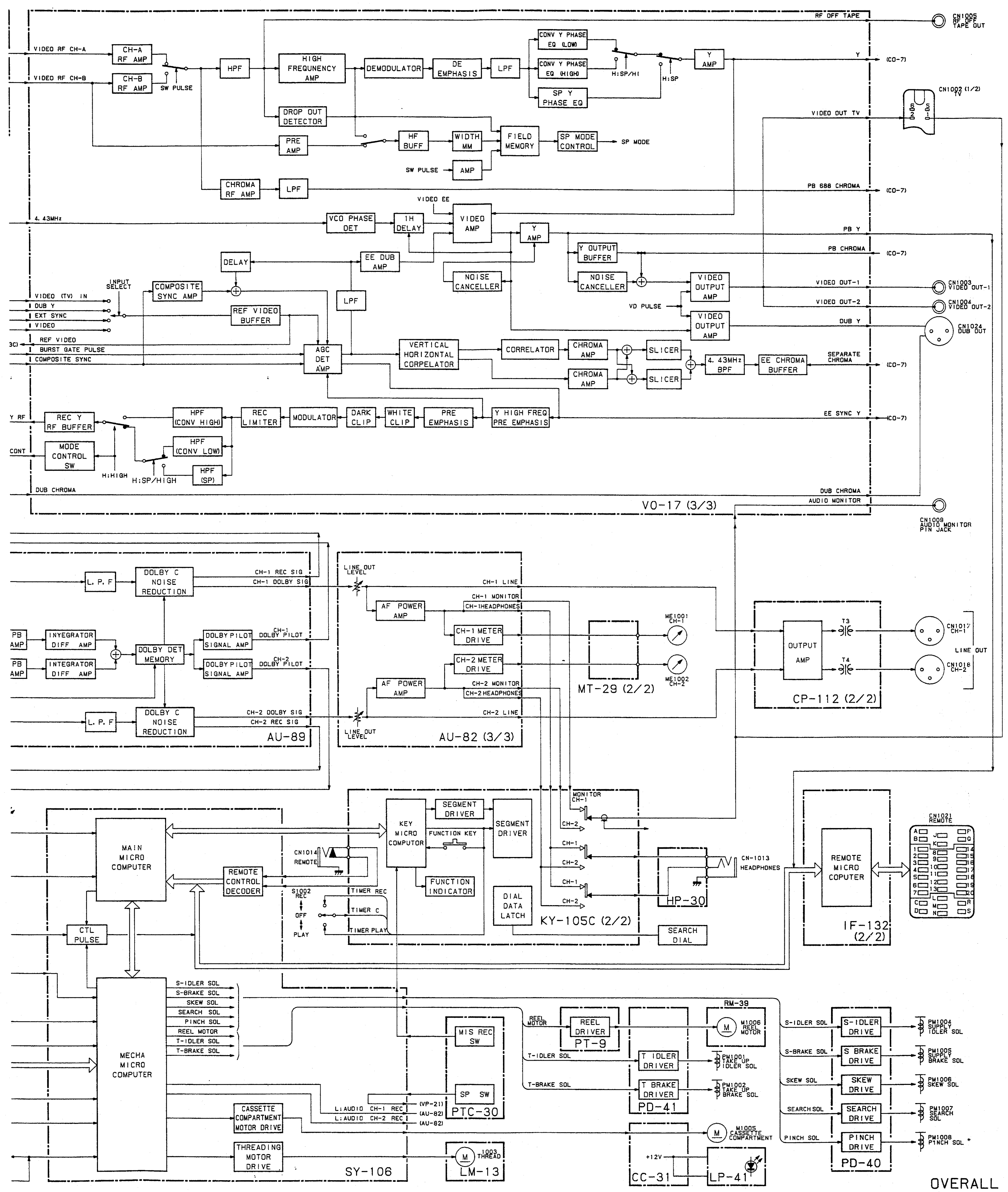
SECTION 12
BLOCK DIAGRAM

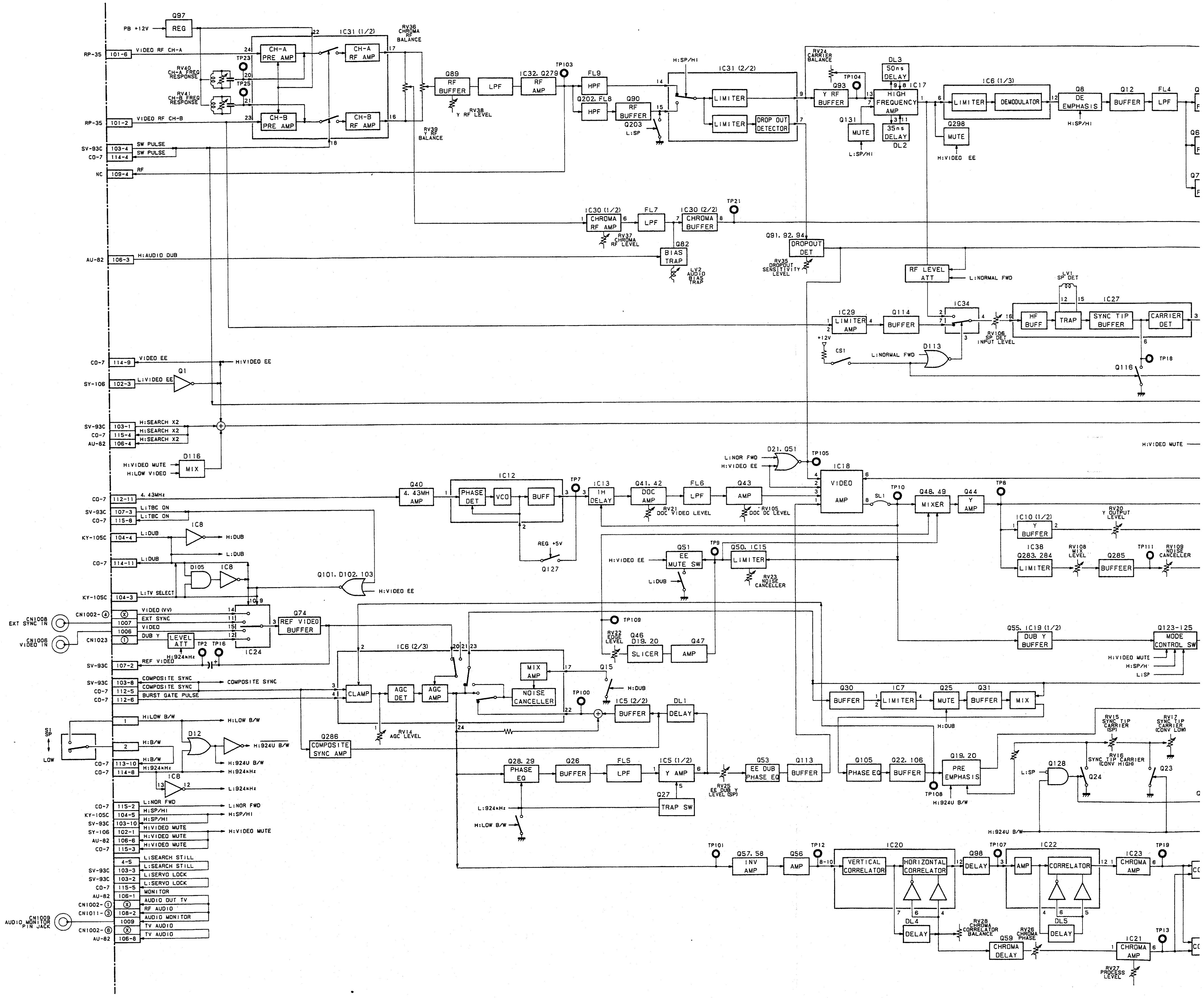
OVERALL
BLOCK DIAGRAM


CNM023 DUB IN
VO-17 (1/3)
(VO-17)
(924kHz) PB 685kHz CHROMA
DUB CHROMA
SEPARATE CHROMA
L. P. F
DELAY
PB MODE CONTROL SW
PB PHASE EQ
H:PB
H:PB+DUB
REC
ACC AMP
FREQ CONV
EE. C DELAY
CHROMA EE/PB SW
H:PB+DUB
DUB CHROMA AMP
B. P. F
CHROMA AMP
DELAY ADJ
H:DUB
EE/PB CHROMA
DUB CHROMA
REC CHROMA
DG COMP
H:VIDEO EE
H:924kHz
H:685kHz
ACC TIME CONST
H:DUB CONT
V BLK PULSE
PB ACC LEVEL
ACC DET
ACK
4. 43MHz OSC
REF OSC
4. 43MHz AMP
4. 43MHz
APC BURST GATE MMV
APC DET
PHASE SHIFT
ACC BURST GATE MMV
BURST GATE PULSE
COMPOSITE SYNC
S1004 COLOR LOCK
L:COLOR LOCK SW CONT
EE SYNC Y
Y
H:VIDEO EE
COUNTER VCO/ SAMPLE HOLD
SEARCH×1/30 /STILL CONTROL SW (TBC MODE)
H:924KHz
L:TBC ON
H:REV
H:SEARCH×2
CO-7
VO-17 (2/3)
REC CHROMA
REC Y RF
C REC BUFFER
Y REC BUFFER
Y/C MIXER
Y REC LEVEL HI/LOW/SP
CH-A REC AMP
CH-B REC AMP
CH-A VIDEO HEAD
CH-B VIDEO HEAD
CH-A PB AMP
CH-B PB AMP
RP-35
VIDEO RF CH-A
VIDEO RF CH-B
4. 43MHz
CN1002 (2/2) TV
INPUT SELECT
VIDEO (TV) IN
DUB Y
EXT SYNC
VIDEO
CN1008 EXT SYNC
CN1006 VIDEO IN
(SV-93C)
REF VIDEO
BURST GATE PULSE
COMPOSITE SYNC
REC Y RF
REC Y RF BUFFER
REC MODE CONT
MODE CONTROL SW
H:HIGH
DUB CHROMA
CN1015 CH-1
CN1016 CH-2
AUDIO IN
T1
T2
CP112 (1/2)
CN1019 AUDIO CH-1 MIC JACK
CN1020 AUDIO CH-2 MIC JACK
MC-28
CH-1 AUDIO
CH-1 MIC
MIC AMP
L:CH-1 MIC
CH-2 AUDIO
L:CH-2 MIC
TV AUDIO IN
H:TV
AU-82 (1/3)
INPUT SELECT
DOLBY
KY-105C (1/2)
AUDIO CH-1 REC VR
AUDIO CH-2 REC VR
TRACKING
MT-129 (1/2)
CN1022 RX-DATA JACK
IF-132 (1/2)
LINE AMP
H1003 (1/3)
AUDIO CH-1 REC/PB
H1003 (2/3)
AUDIO CH-2 REC/PB
CH-1 ERASE
CH-2 ERASE
H1002 (1/2) FULL ERASE
EC-28 (1/2)
CH-1 PB AMP
CH-1 RECAMP
PB LEVEL
REC LEVEL
L:AUDIO CH-1 EE
CH-1 DOLBY SIG
CH-1 DOLBY DET
CH-1 REC SIG
CH-1 DOLBY PILOT
CH-2 PB AMP
CH-2 RECAMP
L:AUDIO CH-2 EE
CH-2 DOLBY SIG
CH-2 DOLBY DET
CH-2 REC SIG
CH-2 DOLBY PILOT
ERASE OSC
L:SP
RY601
L:AUDIO CH-1 REC
L:AUDIO CH-2 REC
(KY-105)
FULL ERASE OSC
AU-82 (2/3)
L. P. F
CH-1 PB PILOT AMP
CH-2 PB PILOT AMP
INYEGRATOR DIFF AMP
INTEGRATOR DIFF AMP
PH-5 TAPE END SENSOR
PH-5 TAPE BEGINNING SENSOR
MAI MICF COMPU
EC-28 (2/2)
H1002 (2/2) CTL PB
CTL PULSE
TG-22
SE-46 TENTION REGULATOR DET
PTC-35 SUPPLY ROTATION DET
PTC-35 TAKE UP ROTATION DET
PTC-34 FR UNTHREAD END DET
PTC-33 THREAD END/ UNTHREAD END DET
CC-33 CASSETTE DOWN DET
CC-32 CASSETTE IN DET
MECH MICF COMPU
PG1001 SPEED PG (B)
PG1002 SPEED PG (A)
PG1003 PHASE PG
VO-17
REF VIDEO
PB
DRUM SPEED SERVO PWM
DRUM PHASE SERVO PWM
φ° COMPARATOR
AFC
DRUM ERROR AMP
DRUM MOTOR DRIVE
M1002 DRUM
DME
CAPSTAN SPEED SERVO PWM
CAPSTAN ERROR AMP
SERVO CONTROL
SERVO SYSTEM CONTROL
NOMAL
SEARCH
CAPSTAN MOTOR DRIVE
M1001 CAPSTAN
H1003 (3/3)
CTL REC/PB
CTL REC/ PB AMP
CAPSTAN SPEED SERVO PWM
SV-93C
REG+12V
SYS+12V
REG+7V
REG+5V
+5V REG
DC-31
J MODEL ONLY
CN1001 AC IN
VN1010 AC OUT
UC MODEL ONLY
AC-65
S1001 POWER
ON
SW REG
UR-14


RF OFF TAPE
CN1005 RF OFF TAPE OUT
VIDEO RF CH-A
VIDEO RF CH-B
CH-A RF AMP
CH-B RF AMP
SW PULSE
HPF
HIGH FREQUENCY AMP
DEMODULATOR
DE EMPHASIS
LPF
CONV Y PHASE EQ (LOW)
CONV Y PHASE EQ (HIGH)
SP Y PHASE EQ
H:SP/HI
H:SP
Y AMP
Y
(CO-7)
CN1002 (1/2) TV
VIDEO OUT TV
DROP OUT DETECTOR
PRE AMP
HF BUFF
WIDTH MM
FIELD MEMORY
SP MODE CONTROL
SP MODE
SW PULSE
AMP
CHROMA RF AMP
LPF
PB 688 CHROMA
VIDEO EE
4.43MHz
VCO PHASE DET
1H DELAY
VIDEO AMP
Y AMP
PB Y
DELAY
EE DUB AMP
Y OUTPUT BUFFER
PB CHROMA
NOISE CANCELLER
NOISE CANCELLER
VIDEO OUTPUT AMP
VIDEO OUT-1
CN1003 VIDEO OUT-1
VD PULSE
VIDEO OUTPUT AMP
VIDEO OUT-2
CN1004 VIDEO OUT-2
DUB Y
CN1024 DUB OUT
INPUT SELECT
VIDEO (TV) IN
DUB Y
EXT SYNC
VIDEO
COMPOSITE SYNC AMP
REF VIDEO BUFFER
LPF
REF VIDEO
BURST GATE PULSE
COMPOSITE SYNC
AGC DET AMP
VERTICAL HORIZONTAL CORRELATOR
CORRELATOR
CHROMA AMP
CHROMA AMP
SLICER
SLICER
4.43MHz BPF
EE CHROMA BUFFER
SEPARATE CHROMA
Y RF
REC Y RF BUFFER
HPF (CONV HIGH)
HPF (CONV LOW)
HPF (SP)
REC LIMITER
MODULATOR
DARK CLIP
WHITE CLIP
PRE EMPHASIS
Y HIGH FREQ PRE EMPHASIS
EE SYNC Y
CONT
MODE CONTROL SW
H:HIGH
H:SP/HIGH
DUB CHROMA
DUB CHROMA
AUDIO MONITOR
VO-17 (3/3)
CN1008 AUDIO MONITOR PIN JACK
L.P.F
DOLBY C NOISE REDUCTION
CH-1 REC SIG
CH-1 DOLBY SIG
PB AMP
INYEGRATOR DIFF AMP
INTEGRATOR DIFF AMP
DOLBY DET MEMORY
DOLBY PILOT SIGNAL AMP
CH-1 DOLBY PILOT
CH-2 DOLBY PILOT
L.P.F
DOLBY C NOISE REDUCTION
CH-2 DOLBY SIG
CH-2 REC SIG
AU-89
LINE OUT LEVEL
CH-1 LINE
CH-1 MONITOR
CH-1 HEADPHONES
AF POWER AMP
CH-1 METER DRIVE
CH-2 METER DRIVE
AF POWER AMP
CH-2 MONITOR
CH-2 HEADPHONES
CH-2 LINE
AU-82 (3/3)
ME1001 CH-1
ME1002 CH-2
MT-29 (2/2)
OUTPUT AMP
T3
T4
CP-112 (2/2)
CN1017 CH-1
CN1016 CH-2
LINE OUT
MAIN MICRO COMPUTER
REMOTE CONTROL DECODER
CN1014 REMOTE
S1002 REC OFF PLAY
TIMER REC
TIMER C
TIMER PLAY
KEY MICRO COMPUTOR
SEGMENT DRIVER
SEGMENT DRIVER
FUNCTION KEY
FUNCTION INDICATOR
DIAL DATA LATCH
KY-105C (2/2)
MONITOR CH-1
CH-2
CH-1
CH-2
CH-1
CH-2
CN-1013 HEADPHONES
HP-30
SEARCH DIAL
REMOTE MICRO COPUTER
IF-132 (2/2)
CN1021 REMOTE
CTL PULSE
MECHA MICRO COMPUTER
S-IDLER SOL
S-BRAKE SOL
SKEW SOL
SEARCH SOL
PINCH SOL
REEL MOTOR
T-IDLER SOL
T-BRAKE SOL
MIS REC SW
SP SW
PTC-30
L:AUDIO CH-1 REC
L:AUDIO CH-2 REC
(VP-21)
(AU-82)
(AU-82)
CASSETTE COMPARTMENT MOTOR DRIVE
THREADING MOTOR DRIVE
SY-106
M1003 THREAD
LM-13
REEL MOTOR
REEL DRIVER
PT-9
T-IDLER SOL
T IDLER DRIVER
T-BRAKE SOL
T BRAKE DRIVER
PD-41
RM-39
M1006 REEL MOTOR
PM1001 TAKE UP IDLER SOL
PM1002 TAKE UP BRAKE SOL
M1005 CASSETTE COMPARTMENT
+12V
CC-31
LP-41
S-IDLER SOL
S-IDLER DRIVE
S-BRAKE SOL
S BRAKE DRIVE
SKEW SOL
SKEW DRIVE
SEARCH SOL
SEARCH DRIVE
PINCH SOL
PINCH DRIVE
PD-40
PM1004 SUPPLY IDLER SOL
PM1005 SUPPLY BRAKE SOL
PM1006 SKEW SOL
PM1007 SEARCH SOL
PM1008 PINCH SOL

OVERALL
VO-9800P

VIDEO SYSTEM BLOCK DIAGRAM


Q97
REG
PB +12V
CH-A PRE AMP
CH-B PRE AMP
CH-A RF AMP
CH-B RF AMP
IC31 (1/2)
RV36 CHROMA RF BALANCE
RV40 CH-A FREQ RESPONSE
RV41 CH-B FREQ RESPONSE
RV39 Y RF BALANCE
Q89 RF BUFFER
RV38 Y RF LEVEL
LPF
IC32, Q279 RF AMP
TP103
FL9 HPF
Q202, FL8 HPF
Q90 RF BUFFER
Q203
L:SP
H:SP/HI
IC31 (2/2)
LIMITER
DROP OUT DETECTOR
RV24 CARRIER BALANCE
Q93 Y RF BUFFER
TP104
DL3 50ns DELAY
IC17 HIGH FREQUENCY AMP
35ns DELAY DL2
Q131 MUTE
L:SP/HI
IC6 (1/3)
LIMITER
DEMODULATOR
Q298 MUTE
H:VIDEO EE
Q8 DE EMPHASIS
Q12 BUFFER
FL4 LPF
IC30 (1/2) CHROMA RF AMP
RV37 CHROMA RF LEVEL
FL7 LPF
IC30 (2/2) CHROMA BUFFER
TP21
Q82 BIAS TRAP
LV2 AUDIO BIAS TRAP
Q91, 92, 94 DROPOUT DET
RV35 DROPOUT SENSITIVITY LEVEL
RF LEVEL ATT
L:NORMAL FWD
IC29 LIMITER AMP
Q114 BUFFER
IC34
RV106 SP DET INPUT LEVEL
LV1 SP DET
IC27
HF BUFF
TRAP
SYNC TIP BUFFER
CARRIER DET
CS1
D113
Q116
TP18
RP-35 101-6 VIDEO RF CH-A
RP-35 101-2 VIDEO RF CH-B
SV-93C 103-4 SW PULSE
CO-7 114-4 SW PULSE
NC 109-4 RF
AU-82 106-3 H:AUDIO DUB
CO-7 114-9 VIDEO EE
H:VIDEO EE
SY-106 102-3 L:VIDEO EE
Q1
SV-93C 103-1 H:SEARCH X2
CO-7 115-4 H:SEARCH X2
AU-82 106-4 H:SEARCH X2
D116 MIX
H:VIDEO MUTE
H:LOW VIDEO
D21, Q51
L:NOR FWD
H:VIDEO EE
TP105
IC18 VIDEO AMP
H:VIDEO MUTE
CO-7 112-11 4.43MHz
Q40 4.43MH AMP
IC12
PHASE DET
VCO
BUFF
TP7
IC13 1H DELAY
Q41, 42 DOC AMP
RV21 DOC VIDEO LEVEL
FL6 LPF
Q43 AMP
RV105 DOC DC LEVEL
SL1
TP10
Q48, 49 MIXER
Q44 Y AMP
TP8
IC10 (1/2) Y BUFFER
RV20 Y OUTPUT LEVEL
IC38 Q283, 284 LIMITER
RV108 MIX LEVEL
Q285 BUFFEER
TP111
RV109 NOISE CANCELLER
SV-93C 107-3 L:TBC ON
CO-7 115-8 L:TBC ON
IC8
KY-105C 104-4 L:DUB
H:DUB
CO-7 114-11 L:DUB
D105
KY-105C 104-3 L:TV SELECT
Q101, D102, 103
REG +5V
Q127
Q51 EE MUTE SW
TP9
Q50, IC15 LIMITER
RV23 NOISE CANCELLER
L:DUB
CN1008 EXT SYNC IN
CN1006 VIDEO IN
CN1002-④ VIDEO (VV)
1007 EXT SYNC
1006 VIDEO
CN1023 DUB Y
LEVEL ATT
H:924kHz
TP2
TP16
IC24
SV-93C 107-2 REF VIDEO
Q74 REF VIDEO BUFFER
TP109
RV22 EDGE LEVEL
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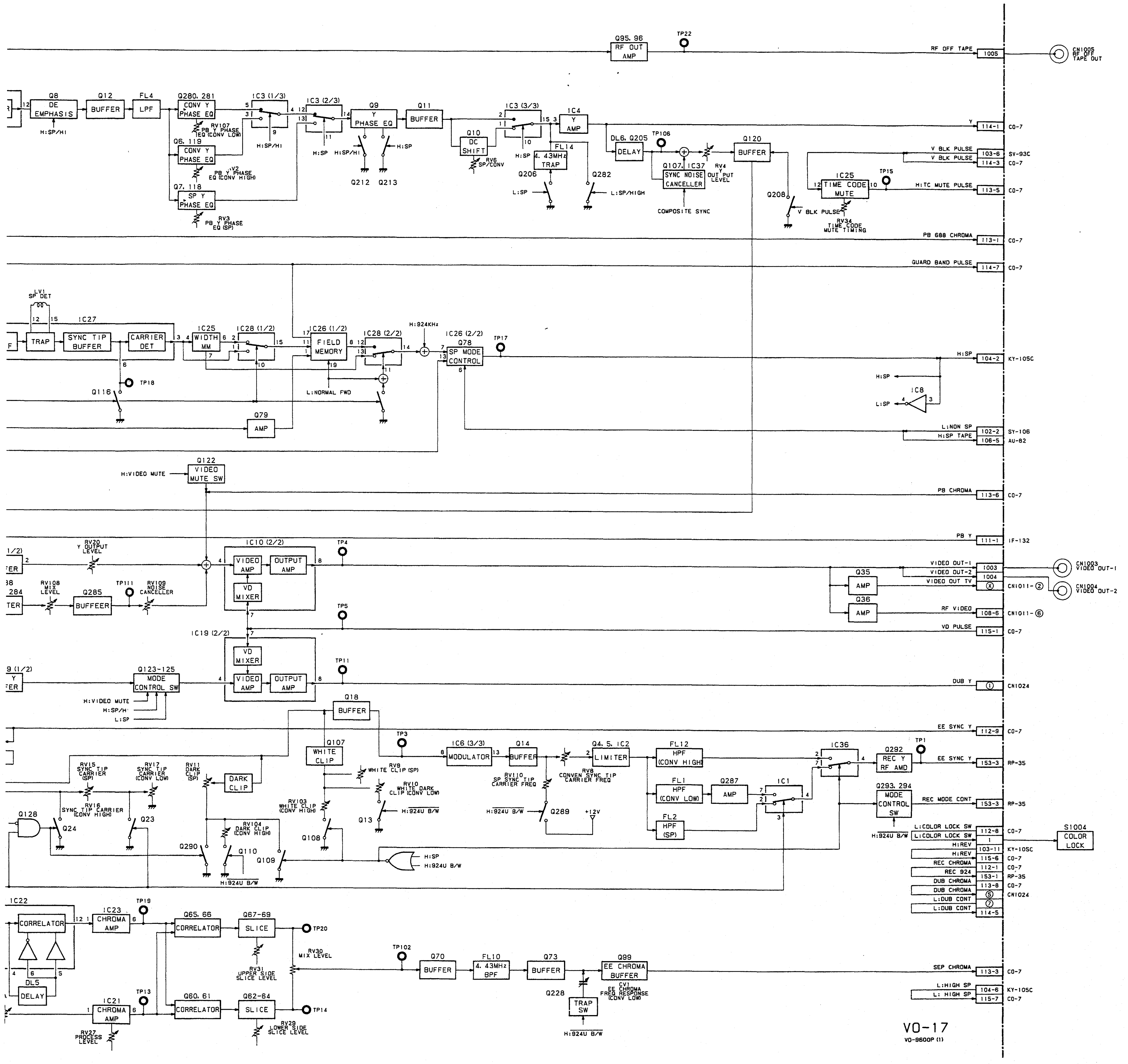
Q47 AMP
IC6 (2/3)
MIX AMP
NOISE CANCELLER
Q15
H:DUB
SV-93C 103-8 COMPOSITE SYNC
CO-7 112-5 COMPOSITE SYNC
CO-7 112-6 BURST GATE PULSE
COMPOSITE SYNC
CLAMP
AGC DET
AGC AMP
RV14 AGC LEVEL
TP100
IC5 (2/2) BUFFER
DL1 DELAY
Q55, IC19 (1/2) DUB Y BUFFER
Q123-125 MODE CONTROL SW
H:VIDEO MUTE
H:SP/HI
L:SP
Q30 BUFFER
IC7 LIMITER
Q25 MUTE
Q31 BUFFER
MIX
H:DUB
S1 SP LOW
H:LOW B/W
H:B/W
D12
H:924U B/W
Q286 COMPOSITE SYNC AMP
CO-7 113-10 H:B/W
CO-7 114-8 H:924kHz
H:924kHz
L:924kHz
Q28, 29 PHASE EQ
Q26 BUFFER
FL5 LPF
IC5 (1/2) Y AMP
Q27 TRAP SW
L:924kHz
H:LOW B/W
RV25 EE DUB Y LEVEL (SP)
Q53 EE DUB PHASE EQ
Q113 BUFFER
Q105 PHASE EQ
Q22, 106 BUFFER
TP108
Q19, 20 PRE EMPHASIS
H:924U B/W
RV15 SYNC TIP CARRIER (SP)
RV16 SYNC TIP CARRIER (CONV HIGH)
RV17 SYNC TIP CARRIER (CONV LOW)
L:SP
Q128
Q24
Q23
CO-7 115-2 L:NOR FWD
KY-105C 104-5 H:SP/HI
SV-93C 103-10 H:SP/HI
SY-106 102-1 H:VIDEO MUTE
AU-82 106-6 H:VIDEO MUTE
CO-7 115-3 H:VIDEO MUTE
L:NOR FWD
H:SP/HI
H:VIDEO MUTE
4-5 L:SEARCH STILL
SV-93C 103-3 L:SEARCH STILL
SV-93C 103-2 L:SERVO LOCK
CO-7 115-5 L:SERVO LOCK
AU-82 106-1 MONITOR
CN1002-① AUDIO OUT TV
CN1011-③ 108-2 RF AUDIO
1009 AUDIO MONITOR
CN1009 AUDIO MONITOR PIN JACK
CN1002-⑥ TV AUDIO
AU-82 106-8 TV AUDIO
TP101
Q57, 58 INV AMP
Q56 AMP
TP12
IC20
VERTICAL CORRELATOR
HORIZONTAL CORRELATOR
DL4 DELAY
RV28 CHROMA CORRELATOR BALANCE
Q98 DELAY
TP107
IC22
AMP
CORRELATOR
DL5 DELAY
RV26 CHROMA PHASE
Q59 CHROMA DELAY
IC23 CHROMA AMP
TP19
TP13
IC21 CHROMA AMP
RV27 PROCESS LEVEL


Q95, 96
RF OUT AMP
TP22
RF OFF TAPE
1005
CN1005 RF OFF TAPE OUT
Q8
DE EMPHASIS
H:SP/HI
Q12
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FL4
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CONV Y PHASE EQ
RV2 PB Y PHASE EQ (CONV HIGH)
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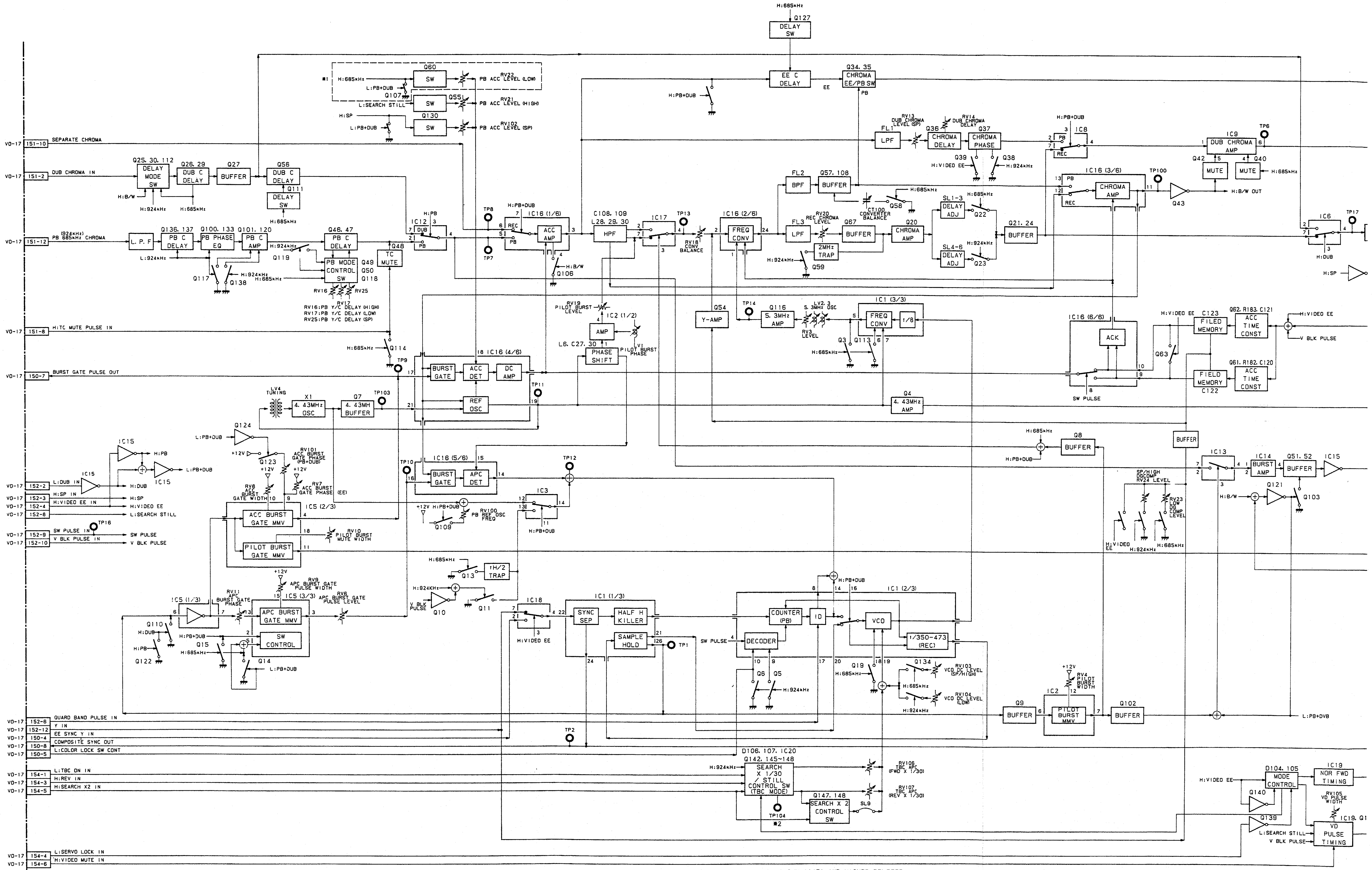
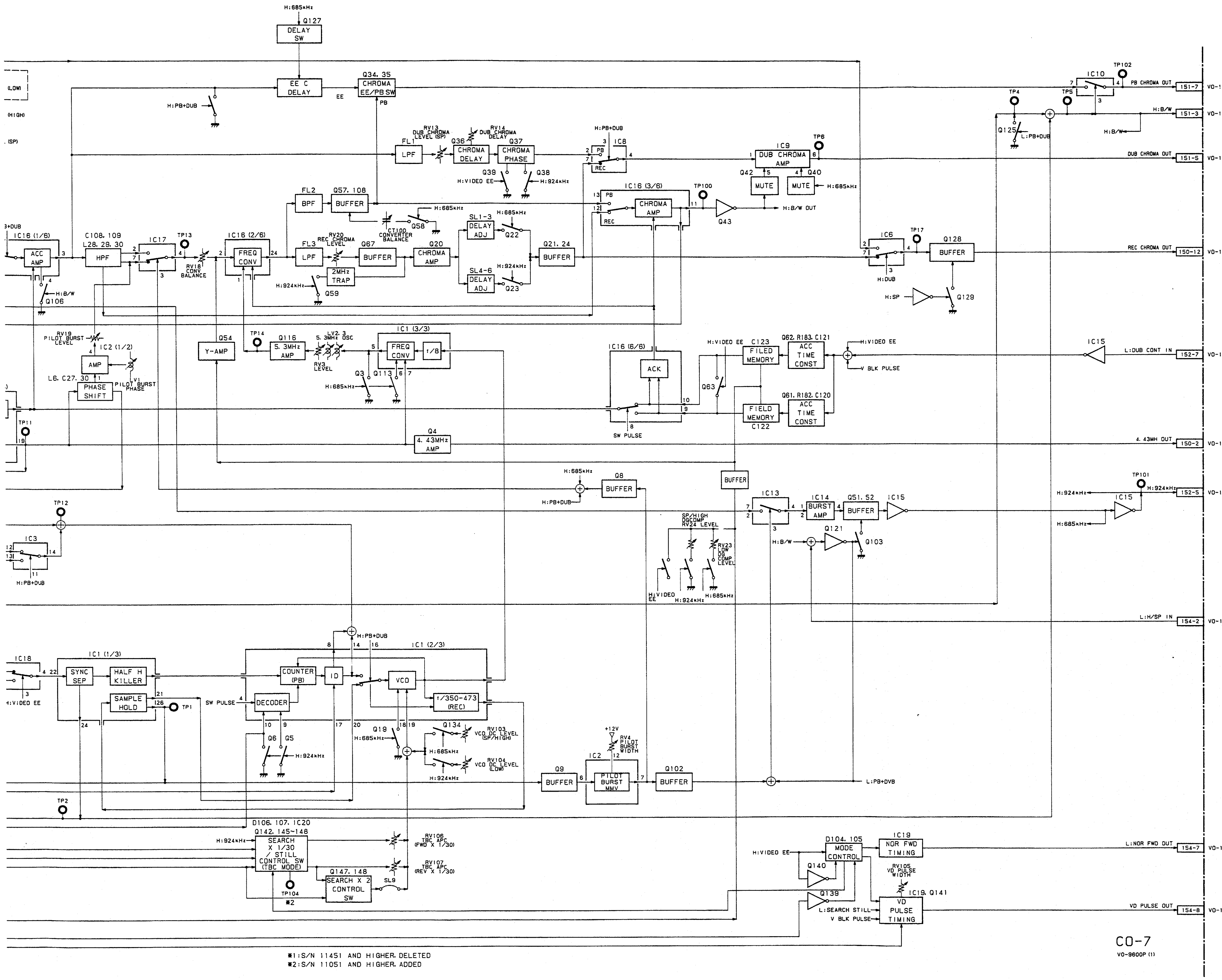
RV3 PB Y PHASE EQ (SP)
IC3 (1/3)
H:SP/HI
IC3 (2/3)
H:SP
H:SP/HI
Q9
Y PHASE EQ
H:SP
Q212
Q213
Q11
BUFFER
Q10
DC SHIFT
RV6 SP/CONV
IC3 (3/3)
H:SP
4.43MHz TRAP
FL14
Q206
L:SP
IC4
Y AMP
Q282
L:SP/HIGH
DL6, Q205
DELAY
TP106
Q107, IC37
SYNC NOISE CANCELLER
COMPOSITE SYNC
RV4 Y OUT PUT LEVEL
Q120
BUFFER
Y
114-1
CO-7
V BLK PULSE
103-6
SV-93C
V BLK PULSE
114-3
CO-7
IC25
TIME CODE MUTE
TP15
H:TC MUTE PULSE
113-5
CO-7
Q208
V BLK PULSE
RV34 TIME CODE MUTE TIMING
PB 688 CHROMA
113-1
CO-7
GUARD BAND PULSE
114-7
CO-7
LV1 SP DET
IC27
TRAP
SYNC TIP BUFFER
CARRIER DET
TP18
Q116
IC25
WIDTH MM
IC28 (1/2)
IC26 (1/2)
FIELD MEMORY
L:NORMAL FWD
IC28 (2/2)
H:924KHz
IC26 (2/2)
Q78
SP MODE CONTROL
TP17
H:SP
104-2
KY-105C
H:SP
IC8
L:SP
Q79
AMP
L:NON SP
102-2
ST-106
H:SP TAPE
106-5
AU-82
Q122
VIDEO MUTE SW
H:VIDEO MUTE
PB CHROMA
113-6
CO-7
PB Y
111-1
IF-132
RV20 Y OUTPUT LEVEL
IC10 (2/2)
VIDEO AMP
OUTPUT AMP
VD MIXER
TP4
RV108 MIX LEVEL
Q285
BUFFEER
TP111
RV109 NOISE CANCELLER
TP5
IC19 (2/2)
VD MIXER
VIDEO AMP
OUTPUT AMP
TP11
Q35
AMP
Q36
AMP
VIDEO OUT-1
1003
VIDEO OUT-2
1004
VIDEO OUT TV
CN1011-②
CN1003 VIDEO OUT-1
CN1004 VIDEO OUT-2
RF VIDEO
108-6
CN1011-⑥
VD PULSE
115-1
CO-7
Q123-125
MODE CONTROL SW
H:VIDEO MUTE
H:SP/HI
L:SP
DUB Y
CN1024
Q18
BUFFER
EE SYNC Y
112-8
CO-7
TP3
Q107
WHITE CLIP
RV9 WHITE CLIP (SP)
RV10 WHITE DARK CLIP (CONV LOW)
H:924U B/W
Q13
RV103 WHITE CLIP (CONV HIGH)
IC6 (3/3)
MODULATOR
Q14
BUFFER
RV110 SP SYNC TIP CARRIER FREQ
H:924U B/W
Q289
+12V
Q4, 5, IC2
LIMITER
RV8 CONVEN SYNC TIP CARRIER FREQ
FL12
HPF (CONV HIGH)
FL1
HPF (CONV LOW)
Q287
AMP
FL2
HPF (SP)
IC1
IC36
Q292
REC Y RF AMD
TP1
EE SYNC Y
153-3
RP-35
Q293, 294
MODE CONTROL SW
REC MODE CONT
153-3
RP-35
H:924U B/W
L:COLOR LOCK SW
112-6
CO-7
L:COLOR LOCK SW
H:REV
103-11
KY-105C
H:REV
115-6
CO-7
REC CHROMA
112-1
CO-7
REC 924
153-1
RP-35
DUB CHROMA
113-8
CO-7
DUB CHROMA
⑧
CN1024
L:DUB CONT
⑦
L:DUB CONT
114-5
S1004
COLOR LOCK
RV15 SYNC TIP CARRIER (SP)
RV17 SYNC TIP CARRIER (CONV LOW)
RV11 DARK CLIP (SP)
DARK CLIP
RV16 SYNC TIP CARRIER (CONV HIGH)
Q128
Q24
Q23
RV104 DARK CLIP (CONV HIGH)
Q290
Q110
H:924U B/W
Q108
Q109
H:SP
H:924U B/W
IC22
CORRELATOR
DL5
DELAY
IC23
CHROMA AMP
TP19
Q65, 66
CORRELATOR
Q67-69
SLICE
TP20
RV31 UPPER SIDE SLICE LEVEL
RV30 MIX LEVEL
IC21
CHROMA AMP
TP13
Q60, 61
CORRELATOR
Q62-64
SLICE
TP14
RV29 LOWER SIDE SLICE LEVEL
RV27 PROCESS LEVEL
TP102
Q70
BUFFER
FL10
4.43MHz BPF
Q73
BUFFER
Q99
EE CHROMA BUFFER
CV1 EE CHROMA FREQ RESPONSE (CONV LOW)
Q228
TRAP SW
H:924U B/W
SEP CHROMA
113-3
CO-7
L:HIGH SP
104-6
KY-105C
L:HIGH SP
115-7
CO-7
VO-17
VO-8600P (1)

VIDEO SYSTEM BLOCK DIAGRAM

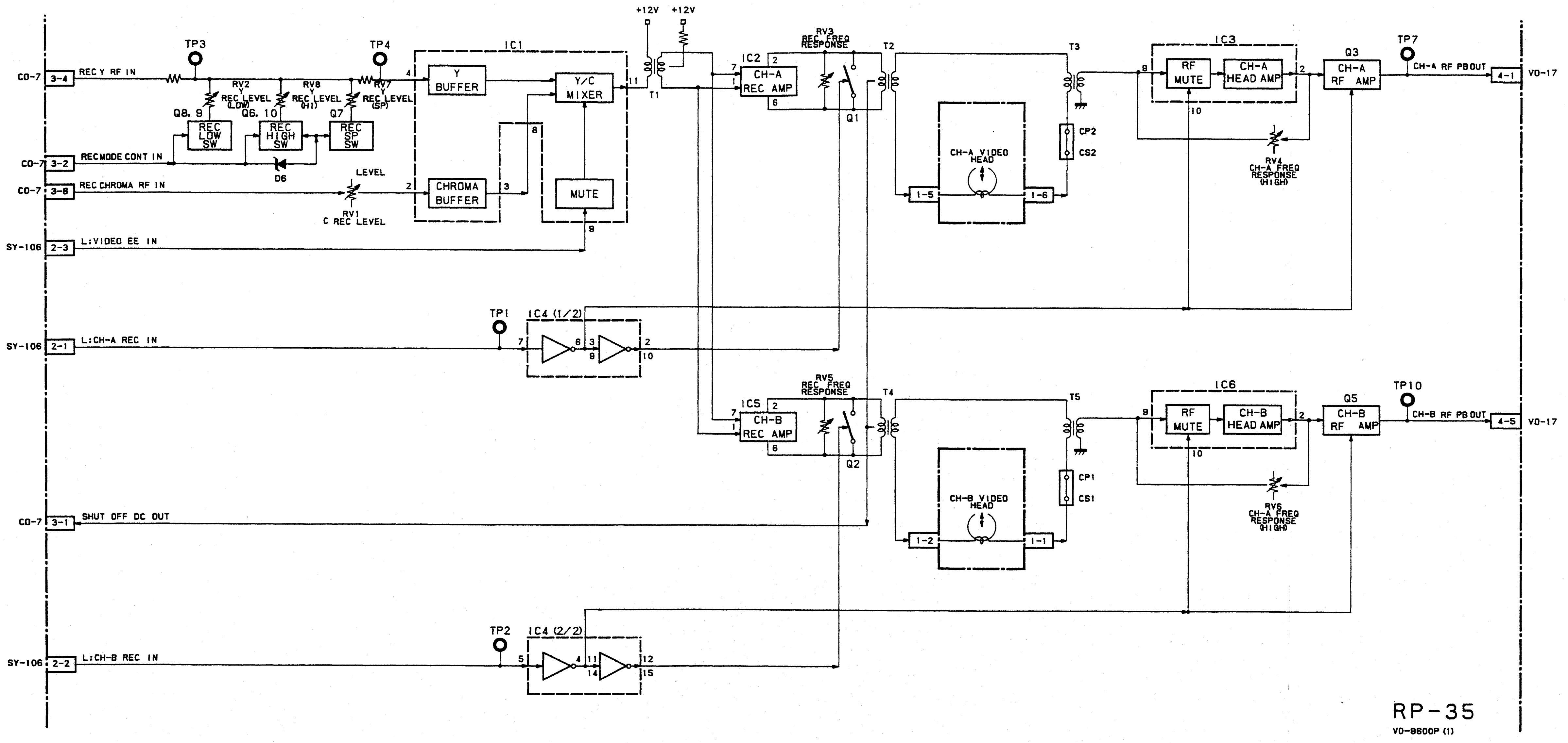

VO-17 IS1-10 SEPARATE CHROMA
VO-17 IS1-2 DUB CHROMA IN
VO-17 IS1-12 (924kHz) PB 685kHz CHROMA
VO-17 IS1-8 H:TC MUTE PULSE IN
VO-17 IS0-7 BURST GATE PULSE OUT
VO-17 IS2-2 L:DUB IN
VO-17 IS2-3 H:SP IN
VO-17 IS2-4 H:VIDEO EE IN
VO-17 IS2-6 L:SEARCH STILL
VO-17 IS2-9 SW PULSE IN
VO-17 IS2-10 V BLK PULSE IN
VO-17 IS2-6 GUARD BAND PULSE IN
VO-17 IS2-12 Y IN
VO-17 IS0-4 EE SYNC Y IN
VO-17 IS0-8 COMPOSITE SYNC OUT
VO-17 IS0-5 L:COLOR LOCK SW CONT
VO-17 IS4-1 L:TBC ON IN
VO-17 IS4-3 H:REV IN
VO-17 IS4-5 H:SEARCH X2 IN
VO-17 IS4-4 L:SERVO LOCK IN
VO-17 IS4-6 H:VIDEO MUTE IN
Q25, 30, 112 DELAY MODE SW
Q26, 29 DUB C DELAY
Q27 BUFFER
Q56 DUB C DELAY
Q111 DELAY SW
L.P.F
Q136, 137 PB C DELAY
Q100, 133 PB PHASE EQ
Q101, 120 PB C AMP
Q46, 47 PB C DELAY
Q48 TC MUTE
PB MODE CONTROL SW
Q49 Q50 Q118
RV16:PB Y/C DELAY (HIGH)
RV17:PB Y/C DELAY (LOW)
RV25:PB Y/C DELAY (SP)
Q60 SW
RV22 PB ACC LEVEL (LOW)
Q107 Q551 SW
RV21 PB ACC LEVEL (HIGH)
Q130 SW
RV102 PB ACC LEVEL (SP)
IC12
IC16 (1/6) ACC AMP
C108, 109 L28, 29, 30 HPF
IC17
RV18 CONV BALANCE
IC16 (2/6) FREQ CONV
Q127 DELAY SW
EE C DELAY
Q34, 35 CHROMA EE/PB SW
FL1 LPF
RV13 DUB CHROMA LEVEL (SP)
RV14 DUB CHROMA DELAY
Q36 CHROMA DELAY
Q37 CHROMA PHASE
IC8
IC9 DUB CHROMA AMP
Q42 MUTE
Q40 MUTE
FL2 BPF
Q57, 108 BUFFER
CT100 CONVERTER BALANCE
Q58
FL3 LPF
RV20 REC CHROMA LEVEL
Q67 BUFFER
Q20 CHROMA AMP
2MHz TRAP
Q59
SL1-3 DELAY ADJ
SL4-6 DELAY ADJ
Q22 Q23
Q21, 24 BUFFER
IC16 (3/6) CHROMA AMP
TP100
Q43
H:B/W OUT
IC6
RV19 PILOT BURST LEVEL
IC2 (1/2) AMP
L6, C27, 30
PHASE SHIFT
V1 PILOT BURST PHASE
Q54 Y-AMP
Q116 5.3MHz AMP
LV2, 3 5.3MHz OSC
RV3 LEVEL
IC1 (3/3) FREQ CONV 1/8
Q3 Q113
IC16 (6/6) ACK
C123 FILED MEMORY
Q62, R183, C121 ACC TIME CONST
FIELD MEMORY C122
Q61, R182, C120 ACC TIME CONST
Q63
SW PULSE
Q4 4.43MHz AMP
IC16 (4/6) BURST GATE ACC DET DC AMP
REF OSC
LV4 TUNING
X1 4.43MHz OSC
Q7 4.43MH BUFFER
TP103
Q114
Q124
RV101 ACC BURST GATE PHASE (PB+DUB)
Q123
RV6 ACC BURST GATE WIDTH
RV7 ACC BURST GATE PHASE (EE)
IC5 (2/3) ACC BURST GATE MMV
PILOT BURST GATE MMV
RV10 PILOT BURST MUTE WIDTH
IC16 (5/6) BURST GATE APC DET
IC3
Q109
RV100 PB REF OSC FREQ
Q8 BUFFER
BUFFER
IC13
IC14 BURST AMP
Q51, 52 BUFFER
IC15
Q121
Q103
SP/HIGH DOCOMP RV24 LEVEL
RV23 LOW DO COMP LEVEL
IC15
Q13 1H/2 TRAP
Q10 Q11
IC18
IC1 (1/3) SYNC SEP HALF H KILLER SAMPLE HOLD
IC1 (2/3) COUNTER (PB) ID VCO DECODER 1/350-473 (REC)
Q6 Q5
Q19
Q134
RV103 VCO DC LEVEL (SP/HIGH)
RV104 VCO DC LEVEL (LOW)
RV9 APC BURST GATE PULSE WIDTH
RV11 APC BURST GATE PHASE
IC5 (1/3)
IC5 (3/3) APC BURST GATE MMV
RV8 APC BURST GATE PULSE LEVEL
SW CONTROL
Q110 Q15 Q14 Q122
Q9 BUFFER
IC2 PILOT BURST MMV
RV4 PILOT BURST WIDTH
Q102 BUFFER
L:PB+DVB
D106, 107, IC20
Q142, 145~148
SEARCH X 1/30 / STILL CONTROL SW (TBC MODE)
Q147, 148 SEARCH X 2 CONTROL SW
SL9
RV106 TBC APC (FWD X 1/30)
RV107 TBC APC (REV X 1/30)
TP104
D104, 105 MODE CONTROL
Q140 Q139
IC19 NOR FWD TIMING
RV105 VD PULSE WIDTH
IC19, Q1
VD PULSE TIMING
TP1 TP2 TP6 TP7 TP8 TP9 TP10 TP11 TP12 TP13 TP14 TP16 TP17

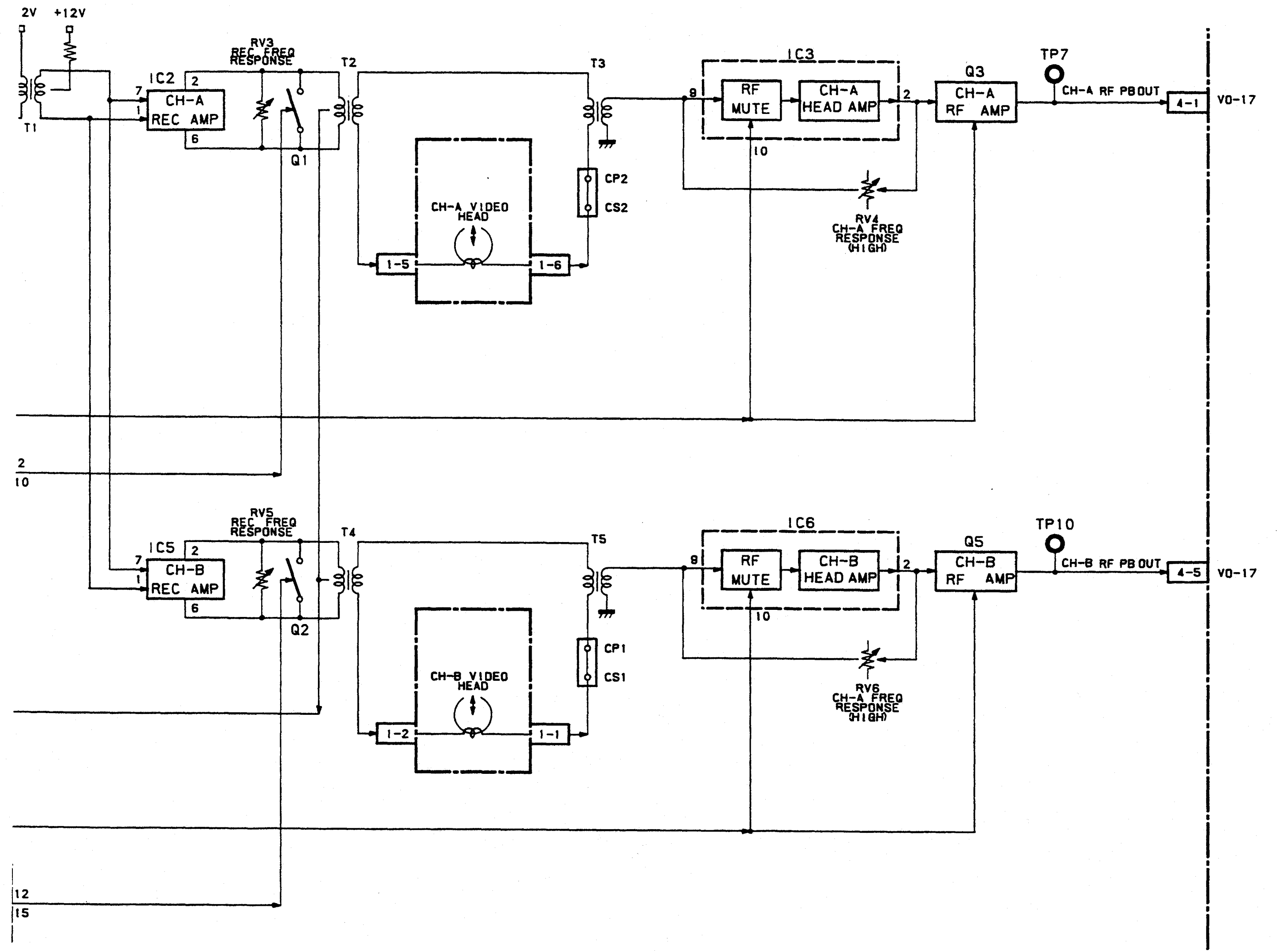
*1:S/N 11451 AND HIGHER, DELETED
*2:S/N 11051 AND HIGHER, ADDED


H:685kHz
Q127
DELAY SW
(LOW)
(HIGH)
(SP)
EE C DELAY
H:PB+DUB
EE
Q34, 35
CHROMA EE/PB SW
PB
RV13 DUB CHROMA LEVEL (SP)
RV14 DUB CHROMA DELAY
FL1
LPF
Q36
CHROMA DELAY
Q37
CHROMA PHASE
Q39
H:VIDEO EE
Q38
H:924kHz
H:PB+DUB
IC8
PB
REC
IC9
DUB CHROMA AMP
TP6
Q42
MUTE
Q40
MUTE
H:685kHz
IC16 (3/6)
PB
REC
CHROMA AMP
TP100
Q43
H:B/W OUT
FL2
BPF
Q57, 108
BUFFER
CT100 CONVERTER BALANCE
Q58
H:685kHz
SL1-3
DELAY ADJ
Q22
SL4-6
DELAY ADJ
Q23
H:924kHz
Q21, 24
BUFFER
IC16 (1/6)
ACC AMP
H:B/W
Q106
C108, 109
L28, 29, 30
HPF
IC17
TP13
RV18 CONV BALANCE
IC16 (2/6)
FREQ CONV
FL3
LPF
RV20 REC CHROMA LEVEL
Q67
BUFFER
2MHz TRAP
H:924kHz
Q59
Q20
CHROMA AMP
IC6
TP17
Q128
BUFFER
H:DUB
H:SP
Q129
IC10
TP102
TP4
TP5
Q125
L:PB+DUB
H:B/W
PB CHROMA OUT
151-7
VO-17
151-3
VO-17
DUB CHROMA OUT
151-5
VO-17
REC CHROMA OUT
150-12
VO-17
RV19 PILOT BURST LEVEL
IC2 (1/2)
AMP
LV1 PILOT BURST PHASE
L6, C27, 30
PHASE SHIFT
TP11
Q54
Y-AMP
TP14
Q116
5. 3MHz AMP
LV2, 3 5. 3MHz OSC
RV3 LEVEL
IC1 (3/3)
FREQ CONV
1/8
Q3
Q113
H:685kHz
Q4
4. 43MHz AMP
IC16 (6/6)
ACK
SW PULSE
H:VIDEO EE
C123
FILED MEMORY
Q62, R183, C121
ACC TIME CONST
Q63
FIELD MEMORY
C122
Q61, R182, C120
ACC TIME CONST
H:VIDEO EE
V BLK PULSE
IC15
L:DUB CONT IN
152-7
VO-17
4. 43MH OUT
150-2
VO-17
H:685kHz
H:PB+DUB
Q8
BUFFER
BUFFER
IC13
IC14
BURST AMP
Q51, 52
BUFFER
IC15
TP101
H:924kHz
H:924kHz
152-5
VO-17
IC15
H:685kHz
SP/HIGH DGCOMP RV24 LEVEL
RV23 LOW DG COMP LEVEL
H:VIDEO EE
H:924kHz
H:685kHz
H:B/W
Q121
Q103
L:H/SP IN
154-2
VO-17
TP12
IC3
H:PB+DUB
IC18
H:VIDEO EE
IC1 (1/3)
SYNC SEP
HALF H KILLER
SAMPLE HOLD
TP1
SW PULSE
H:PB+DUB
IC1 (2/3)
COUNTER (PB)
ID
VCO
DECODER
1/350-473 (REC)
Q6
Q5
H:924kHz
Q19
H:685kHz
Q134
RV103 VCO DC LEVEL (SP/HIGH)
H:685kHz
RV104 VCO DC LEVEL (LOW)
H:924kHz
+12V
RV4 PILOT BURST WIDTH
IC2
Q9
BUFFER
PILOT BURST MMV
Q102
BUFFER
L:PB+DVB
TP2
D106, 107, IC20
Q142, 145~148
H:924kHz
SEARCH X 1/30 / STILL CONTROL SW (TBC MODE)
RV106 TBC APC (FWD X 1/30)
RV107 TBC APC (REV X 1/30)
Q147, 148
SEARCH X 2 CONTROL SW
SL9
TP104
*2
D104, 105
MODE CONTROL
H:VIDEO EE
Q140
Q139
IC19
NOR FWD TIMING
L:NOR FWD OUT
154-7
VO-17
RV105 VD PULSE WIDTH
IC19, Q141
VD PULSE TIMING
L:SEARCH STILL
V BLK PULSE
VD PULSE OUT
154-8
VO-17
CO-7
VO-9600P (1)

*1: S/N 11451 AND HIGHER. DELETED
*2: S/N 11051 AND HIGHER. ADDED

VIDEO SYSTEM
BLOCK DIAGRAM

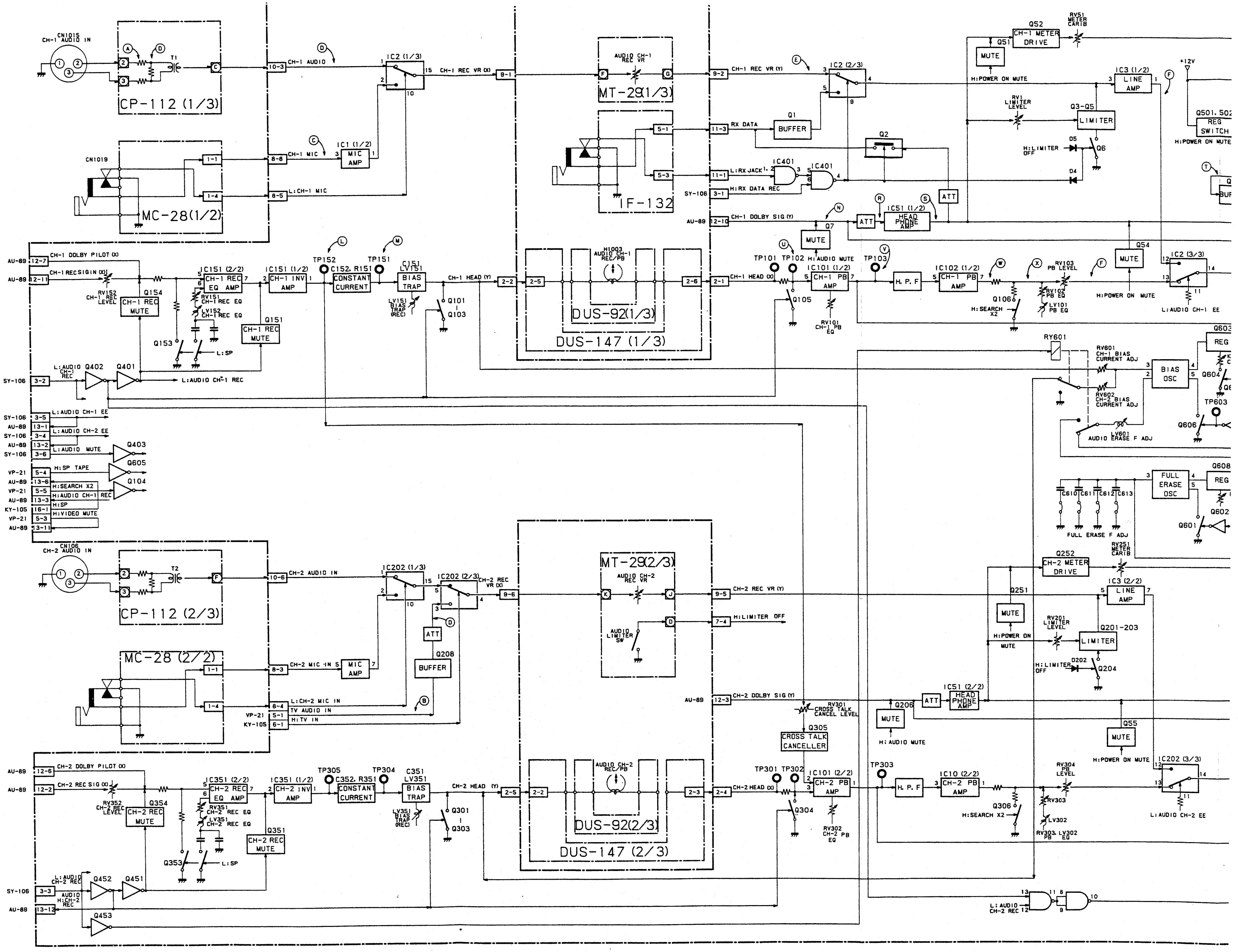

CO-7 3-4 REC Y RF IN
TP3
TP4
RV2 Y REC LEVEL (LOW)
RV8 Y REC LEVEL (HI)
RV7 Y REC LEVEL (SP)
Q8, 9
Q6, 10
Q7
REC LOW SW
REC HIGH SW
REC SP SW
CO-7 3-2 RECMODE CONT IN
D6
CO-7 3-6 REC CHROMA RF IN
LEVEL
RV1 C REC LEVEL
IC1
Y BUFFER
Y/C MIXER
CHROMA BUFFER
MUTE
SY-106 2-3 L:VIDEO EE IN
+12V
+12V
T1
IC2
CH-A REC AMP
RV3 REC FREQ RESPONSE
Q1
T2
T3
CH-A VIDEO HEAD
1-5
1-6
CP2
CS2
IC3
RF MUTE
CH-A HEAD AMP
RV4 CH-A FREQ RESPONSE (HIGH)
Q3
CH-A RF AMP
TP7
CH-A RF PBOUT
4-1
VO-17
TP1
IC4 (1/2)
SY-106 2-1 L:CH-A REC IN
IC5
CH-B REC AMP
RV5 REC FREQ RESPONSE
Q2
T4
T5
CH-B VIDEO HEAD
1-2
1-1
CP1
CS1
IC6
RF MUTE
CH-B HEAD AMP
RV6 CH-A FREQ RESPONSE (HIGH)
Q5
CH-B RF AMP
TP10
CH-B RF PBOUT
4-5
VO-17
CO-7 3-1 SHUT OFF DC OUT
TP2
IC4 (2/2)
SY-106 2-2 L:CH-B REC IN
RP-35
VO-8600P (1)

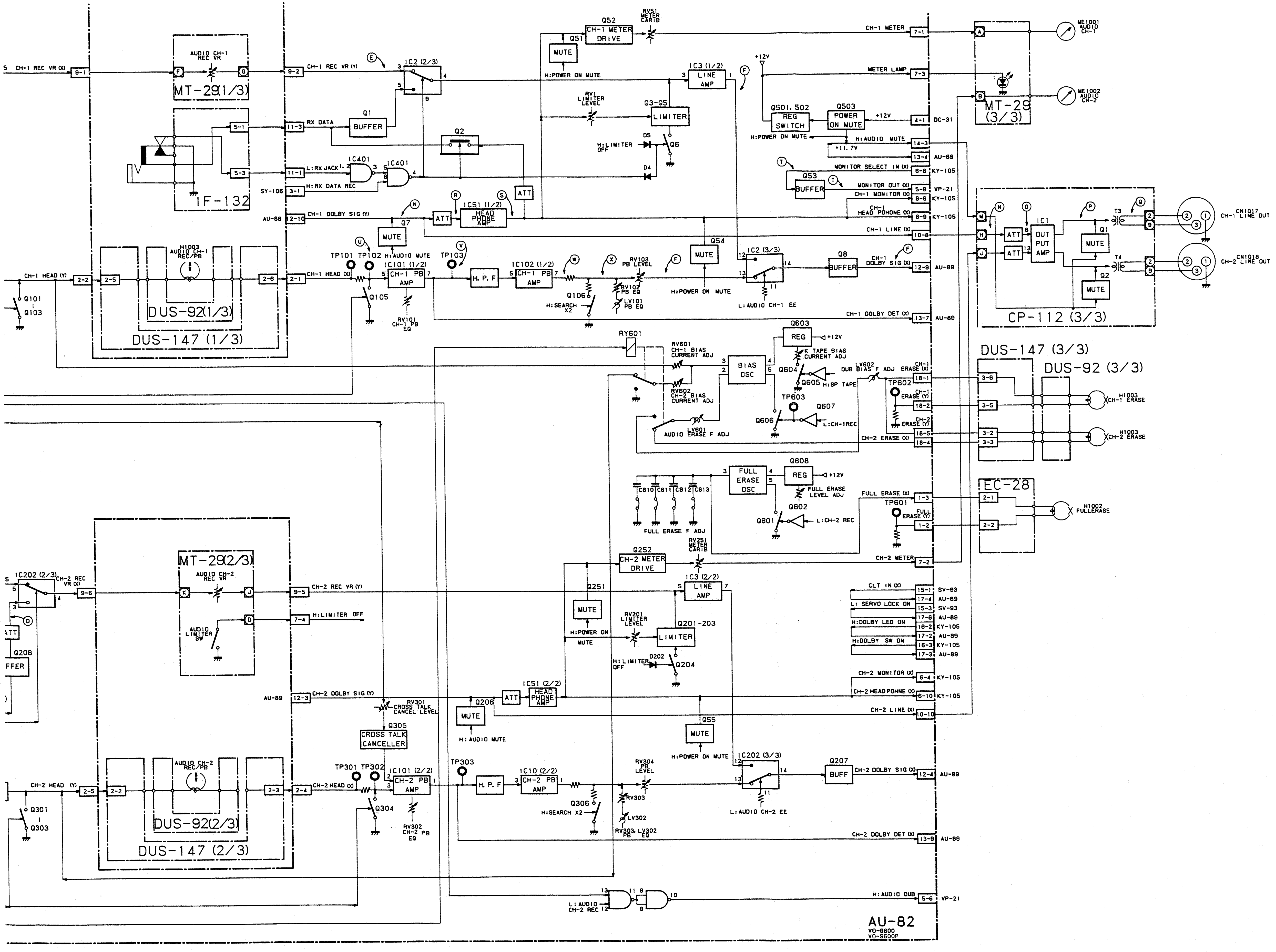

2V
+12V
T1
IC2
7
1
CH-A
REC AMP
2
6
RV3
REC FREQ
RESPONSE
Q1
T2
T3
CP2
CS2
CH-A VIDEO
HEAD
1-5
1-6
IC3
9
RF
MUTE
CH-A
HEAD AMP
2
10
RV4
CH-A FREQ
RESPONSE
(HIGH)
Q3
CH-A
RF AMP
TP7
CH-A RF PBOUT
4-1
VO-17
2
10
IC5
7
1
CH-B
REC AMP
2
6
RV5
REC FREQ
RESPONSE
Q2
T4
T5
CP1
CS1
CH-B VIDEO
HEAD
1-2
1-1
IC6
9
RF
MUTE
CH-B
HEAD AMP
2
10
RV6
CH-A FREQ
RESPONSE
(HIGH)
Q5
CH-B
RF AMP
TP10
CH-B RF PB OUT
4-5
VO-17
12
15

RP-35

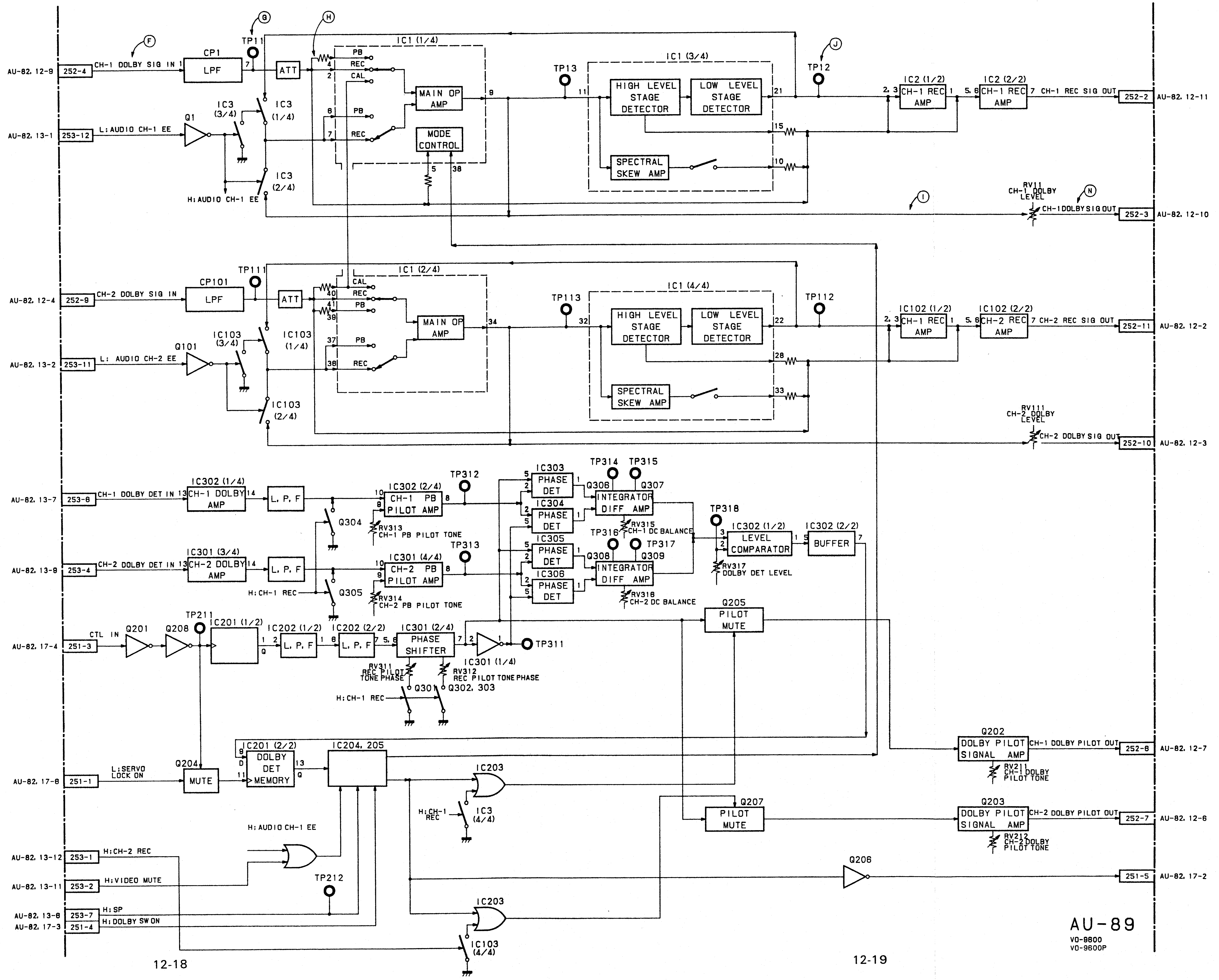
VO-8600P (1)

AUDIO SYSTEM BLOCK DIAGRAM

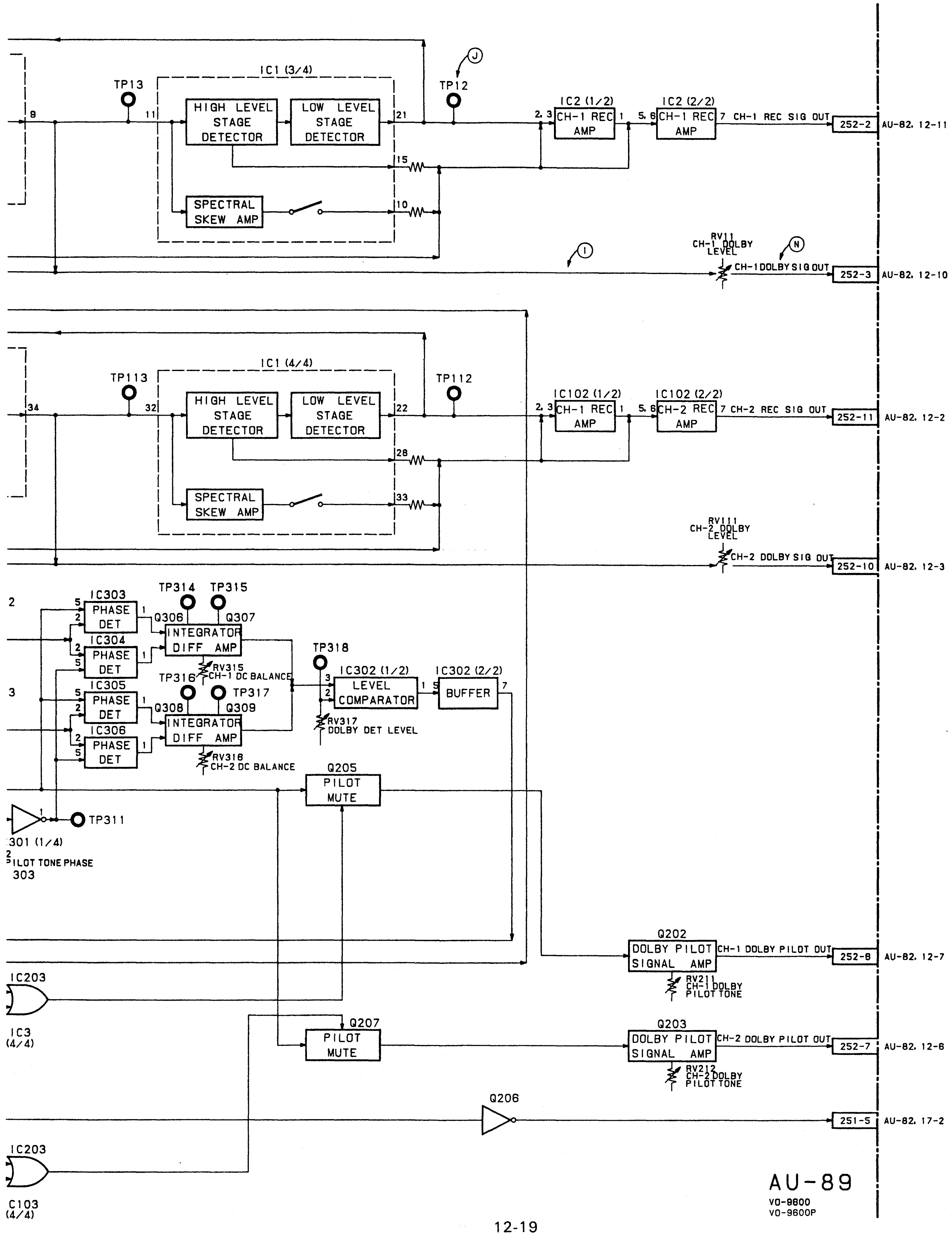

CN1015 CH-1 AUDIO IN
T1
CP-112 (1/3)
CN1019
MC-28(1/2)
CH-1 AUDIO
IC2 (1/3)
CH-1 REC VR (X)
CH-1 MIC
IC1 (1/2) MIC AMP
L:CH-1 MIC
AUDIO CH-1 REC VR
MT-29(1/3)
IF-132
RX DATA
Q1 BUFFER
L:RX JACK
IC401
H:RX DATA REC
CH-1 DOLBY SIG (Y)
Q2
ATT
IC51 (1/2) HEAD PHONE AMP
Q7 MUTE
IC2 (2/3)
CH-1 REC VR (Y)
Q52 CH-1 METER DRIVE
RV51 METER CARIB
Q51 MUTE
H:POWER ON MUTE
RV1 LIMITER LEVEL
Q3-Q5 LIMITER
H:LIMITER OFF
IC3 (1/2) LINE AMP
+12V
Q501, 502 REG SWITCH
H:POWER ON MUTE
CH-1 DOLBY PILOT (X)
CH-1 REC SIG IN (X)
RV152 CH-1 REC LEVEL
Q154 CH-1 REC MUTE
IC151 (2/2) CH-1 REC EQ AMP
RV151 CH-1 REC EQ
LV152 CH-1 REC EQ
Q153
L:SP
IC151 (1/2) CH-1 INV AMP
Q151 CH-1 REC MUTE
TP152 C152, R151 CONSTANT CURRENT
TP151 C151 LV151 BIAS TRAP
LV151 BIAS TRAP (REC)
Q101 Q103
CH-1 HEAD (Y)
H1003 AUDIO CH-1 REC/PB
DUS-92(1/3)
DUS-147 (1/3)
CH-1 HEAD (X)
TP101 TP102 H:AUDIO MUTE
IC101 (1/2) CH-1 PB AMP
Q105
RV101 CH-1 PB EQ
TP103 H.P.F
IC102 (1/2) CH-1 PB AMP
Q106 H:SEARCH X2
RV103 PB LEVEL
RV102 PB EQ
LV101 PB EQ
Q54 MUTE
H:POWER ON MUTE
IC2 (3/3)
L:AUDIO CH-1 EE
L:AUDIO CH-1 REC
Q402 Q401
L:AUDIO CH-1 REC
RY601
RV601 CH-1 BIAS CURRENT ADJ
RV602 CH-2 BIAS CURRENT ADJ
BIAS OSC
Q603 REG
Q604
TP603
Q606
LV601 AUDIO ERASE F ADJ
L:AUDIO CH-1 EE
L:AUDIO CH-2 EE
L:AUDIO MUTE
Q403
H:SP TAPE
Q605
H:SEARCH X2
Q104
H:AUDIO CH-1 REC
H:SP
H:VIDEO MUTE
AU-89 12-7
AU-89 12-11
SY-106 3-2
SY-106 3-5
AU-89 13-1
SY-106 3-4
AU-89 13-2
SY-106 3-6
VP-21 5-4
AU-89 13-6
VP-21 5-5
AU-89 13-3
KY-105 16-1
VP-21 5-3
AU-89 13-11
C610 C611 C612 C613
FULL ERASE F ADJ
FULL ERASE OSC
Q608 REG
Q602
Q601
CN106 CH-2 AUDIO IN
T2
CP-112 (2/3)
CH-2 AUDIO IN
IC202 (1/3)
IC202 (2/3)
CH-2 REC VR (X)
ATT
Q208 BUFFER
MC-28 (2/2)
CH-2 MIC IN
MIC AMP
L:CH-2 MIC IN
TV AUDIO IN
H:TV IN
VP-21 5-1
KY-105 6-1
MT-29(2/3)
AUDIO CH-2 REC VR
AUDIO LIMITER SW
CH-2 REC VR (Y)
H:LIMITER OFF
CH-2 DOLBY SIG (Y)
AU-89 12-3
Q252 CH-2 METER DRIVE
RV251 METER CARIB
Q251 MUTE
H:POWER ON MUTE
RV201 LIMITER LEVEL
Q201-203 LIMITER
H:LIMITER OFF
Q202 Q204
IC3 (2/2) LINE AMP
RV301 CROSS TALK CANCEL LEVEL
Q305 CROSS TALK CANCELLER
Q206 MUTE
H:AUDIO MUTE
ATT
IC51 (2/2) HEAD PHONE AMP
Q55 MUTE
H:POWER ON MUTE
CH-2 DOLBY PILOT (X)
CH-2 REC SIG (X)
RV352 CH-2 REC LEVEL
Q354 CH-2 REC MUTE
IC351 (2/2) CH-2 REC EQ AMP
RV351 CH-2 REC EQ
LV351 CH-2 REC EQ
Q353
L:SP
IC351 (1/2) CH-2 INV AMP
Q351 CH-2 REC MUTE
TP305 C352, R351 CONSTANT CURRENT
TP304 C351 LV351 BIAS TRAP
LV351 BIAS TRAP (REC)
Q301 Q303
CH-2 HEAD (Y)
AUDIO CH-2 REC/PB
DUS-92(2/3)
DUS-147 (2/3)
CH-2 HEAD (X)
TP301 TP302
IC101 (2/2) CH-2 PB AMP
Q304
RV302 CH-2 PB EQ
TP303 H.P.F
IC10 (2/2) CH-2 PB AMP
Q306 H:SEARCH X2
RV304 PB LEVEL
RV303
LV302
RV303, LV302 PB EQ
IC202 (3/3)
L:AUDIO CH-2 EE
L:AUDIO CH-2 REC
Q452 Q451
L:AUDIO H:CH-2 REC
Q453
SY-106 3-3
AU-89 13-12
L:AUDIO CH-2 REC


CH-1 REC VR
MT-29(1/3)
AUDIO CH-1 REC VR
IF-132
DUS-92(1/3)
DUS-147 (1/3)
H1003 AUDIO CH-1 REC/PB
CH-1 HEAD
Q101 Q103
IC2 (2/3)
RX DATA
BUFFER
Q1
Q2
IC401
L:RX JACK
H:RX DATA REC
SY-106
AU-89
CH-1 DOLBY SIG
Q7
MUTE
ATT
IC51 (1/2) HEAD PHONE AMP
TP101 TP102 H:AUDIO MUTE
TP103
IC101 (1/2) CH-1 PB AMP
Q105
RV101 CH-1 PB EQ
H.P.F
IC102 (1/2) CH-1 PB AMP
Q106
H:SEARCH X2
RV103 PB LEVEL
RV102 PB EQ
LV101 PB EQ
Q52 CH-1 METER DRIVE
Q51
RV51 METER CARIB
H:POWER ON MUTE
RV1 LIMITER LEVEL
Q3-Q5 LIMITER
H:LIMITER OFF
D5 D4 Q6
IC3 (1/2) LINE AMP
Q54
IC2 (3/3)
L:AUDIO CH-1 EE
Q8 BUFFER
+12V
Q501, 502 REG SWITCH
Q503 POWER ON MUTE
H:AUDIO MUTE
+11.7V
Q53 BUFFER
CH-1 METER 7-1
METER LAMP 7-3
DC-31
AU-89
MONITOR SELECT IN 6-8 KY-105
MONITOR OUT 5-8 VP-21
CH-1 MONITOR 6-6 KY-105
CH-1 HEAD PHONE 6-9 KY-105
CH-1 LINE 10-8
CH-1 DOLBY SIG 12-8 AU-89
CH-1 DOLBY DET 13-7 AU-89
ME1001 AUDIO CH-1
ME1002 AUDIO CH-2
MT-29 (3/3)
CP-112 (3/3)
IC1 OUT PUT AMP
T3 T4
Q1 Q2 MUTE
CN1017 CH-1 LINE OUT
CN1018 CH-2 LINE OUT
RY601
Q603 REG
RV601 CH-1 BIAS CURRENT ADJ
RV602 CH-2 BIAS CURRENT ADJ
BIAS OSC
TAPE BIAS CURRENT ADJ
Q604 Q605 H:SP TAPE
LV602 DUB BIAS F ADJ
TP602 TP603
Q606 Q607 L:CH-1REC
LV601 AUDIO ERASE F ADJ
CH-1 ERASE 18-1 18-2
CH-2 ERASE 18-5 18-4
DUS-147 (3/3)
DUS-92 (3/3)
H1003 CH-1 ERASE
H1003 CH-2 ERASE
C610 C611 C612 C613
FULL ERASE F ADJ
FULL ERASE OSC
Q608 REG
FULL ERASE LEVEL ADJ
Q601 Q602 L:CH-2 REC
TP601
FULL ERASE 1-3 1-2
EC-28
H1002 FULLERASE
Q252 CH-2 METER DRIVE
RV251 METER CARIB
CH-2 METER 7-2
IC3 (2/2) LINE AMP
Q251 MUTE
RV201 LIMITER LEVEL
Q201-203 LIMITER
D202 Q204
CLT IN 15-1 SV-93
L: SERVO LOCK ON 17-4 AU-89
15-3 SV-93
H:DOLBY LED ON 17-6 AU-89
16-2 KY-105
H:DOLBY SW ON 17-2 AU-89
16-3 KY-105
17-3 AU-89
CH-2 MONITOR 6-4 KY-105
CH-2 HEAD PHONE 6-10 KY-105
CH-2 LINE 10-10
IC202 (2/3)
CH-2 REC VR
MT-29(2/3)
AUDIO CH-2 REC VR
AUDIO LIMITER SW
H:LIMITER OFF
Q208 BUFFER
CH-2 DOLBY SIG
RV301 CROSS TALK CANCEL LEVEL
Q305 CROSS TALK CANCELLER
Q206 MUTE
H:AUDIO MUTE
IC51 (2/2) HEAD PHONE AMP
Q55 MUTE
H:POWER ON MUTE
IC202 (3/3)
L:AUDIO CH-2 EE
Q207 BUFF
CH-2 DOLBY SIG 12-4 AU-89
DUS-92(2/3)
DUS-147 (2/3)
AUDIO CH-2 REC/PB
CH-2 HEAD
Q301 Q303
TP301 TP302
IC101 (2/2) CH-2 PB AMP
Q304
RV302 CH-2 PB EQ
TP303
IC10 (2/2) CH-2 PB AMP
Q306 H:SEARCH X2
RV304 PB LEVEL
RV303 LV302
RV303, LV302 PB EQ
CH-2 DOLBY DET 13-9 AU-89
L:AUDIO CH-2 REC
H:AUDIO DUB 5-6 VP-21
AU-82
VO-9600
VO-9600P

AUDIO SYSTEM BLOCK DIAGRAM

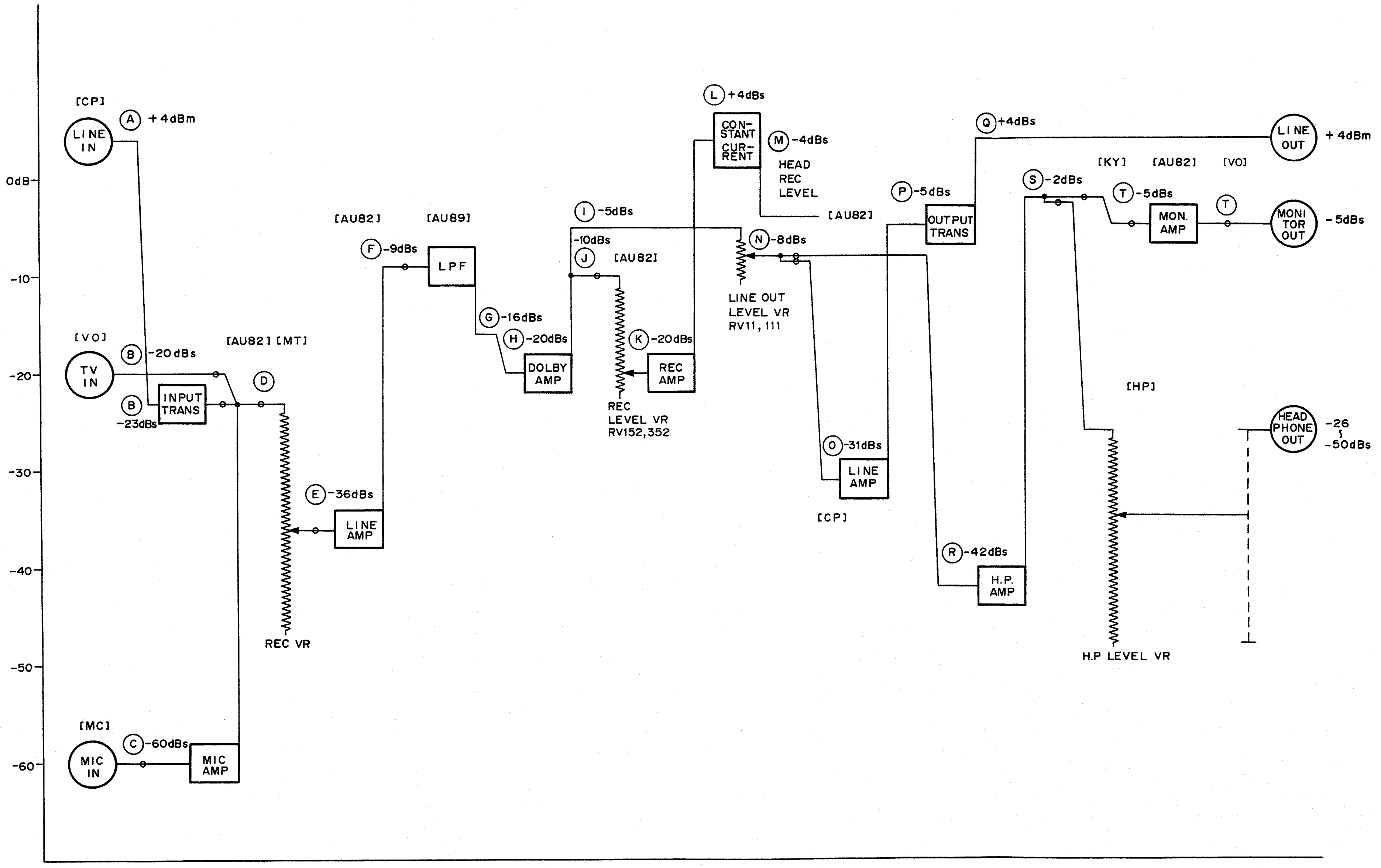

AU-82, 12-9
252-4
CH-1 DOLBY SIG IN
CP1
LPF
TP11
ATT
IC1 (1/4)
PB
REC
CAL
MAIN OP AMP
MODE CONTROL
AU-82, 13-1
253-12
L: AUDIO CH-1 EE
Q1
IC3 (3/4)
IC3 (1/4)
IC3 (2/4)
H: AUDIO CH-1 EE
TP13
IC1 (3/4)
HIGH LEVEL STAGE DETECTOR
LOW LEVEL STAGE DETECTOR
SPECTRAL SKEW AMP
TP12
IC2 (1/2)
CH-1 REC AMP
IC2 (2/2)
CH-1 REC AMP
CH-1 REC SIG OUT
252-2
AU-82, 12-11
RV11 CH-1 DOLBY LEVEL
CH-1 DOLBY SIG OUT
252-3
AU-82, 12-10
AU-82, 12-4
252-9
CH-2 DOLBY SIG IN
CP101
LPF
TP111
ATT
IC1 (2/4)
AU-82, 13-2
253-11
L: AUDIO CH-2 EE
Q101
IC103 (3/4)
IC103 (1/4)
IC103 (2/4)
TP113
IC1 (4/4)
TP112
IC102 (1/2)
CH-1 REC AMP
IC102 (2/2)
CH-2 REC AMP
CH-2 REC SIG OUT
252-11
AU-82, 12-2
RV111 CH-2 DOLBY LEVEL
CH-2 DOLBY SIG OUT
252-10
AU-82, 12-3
AU-82, 13-7
253-8
CH-1 DOLBY DET IN
IC302 (1/4)
CH-1 DOLBY AMP
L. P. F
Q304
IC302 (2/4)
CH-1 PB PILOT AMP
RV313 CH-1 PB PILOT TONE
TP312
IC303 PHASE DET
IC304 PHASE DET
IC305 PHASE DET
IC306 PHASE DET
TP314
TP315
Q306
Q307
INTEGRATOR DIFF AMP
RV315 CH-1 DC BALANCE
TP316
TP317
Q308
Q309
RV316 CH-2 DC BALANCE
TP318
IC302 (1/2)
LEVEL COMPARATOR
RV317 DOLBY DET LEVEL
IC302 (2/2)
BUFFER
AU-82, 13-9
253-4
CH-2 DOLBY DET IN
IC301 (3/4)
CH-2 DOLBY AMP
TP313
IC301 (4/4)
CH-2 PB PILOT AMP
H: CH-1 REC
Q305
RV314 CH-2 PB PILOT TONE
AU-82, 17-4
251-3
CTL IN
Q201
Q208
TP211
IC201 (1/2)
IC202 (1/2)
L. P. F
IC202 (2/2)
IC301 (2/4)
PHASE SHIFTER
IC301 (1/4)
TP311
RV311 REC PILOT TONE PHASE
RV312 REC PILOT TONE PHASE
Q301
Q302, 303
H: CH-1 REC
Q205
PILOT MUTE
AU-82, 17-8
251-1
L: SERVO LOCK ON
Q204
MUTE
IC201 (2/2)
DOLBY DET MEMORY
IC204, 205
IC203
H: CH-1 REC
IC3 (4/4)
Q207
PILOT MUTE
Q202
DOLBY PILOT SIGNAL AMP
CH-1 DOLBY PILOT OUT
252-8
AU-82, 12-7
RV211 CH-1 DOLBY PILOT TONE
Q203
DOLBY PILOT SIGNAL AMP
CH-2 DOLBY PILOT OUT
252-7
AU-82, 12-6
RV212 CH-2 DOLBY PILOT TONE
H: AUDIO CH-1 EE
AU-82, 13-12
253-1
H: CH-2 REC
AU-82, 13-11
253-2
H: VIDEO MUTE
TP212
AU-82, 13-6
253-7
H: SP
AU-82, 17-3
251-4
H: DOLBY SW ON
IC203
IC103 (4/4)
Q206
251-5
AU-82, 17-2
F
G
H
I
J
N

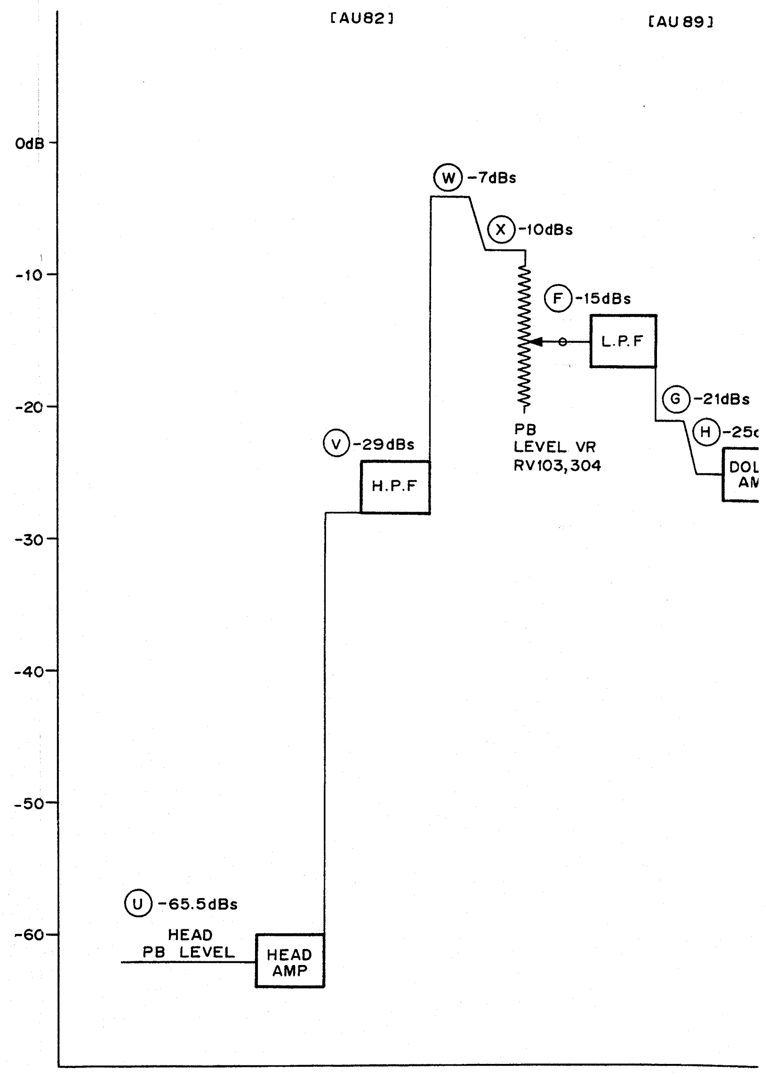
AU-89
VD-9800
VD-9600P

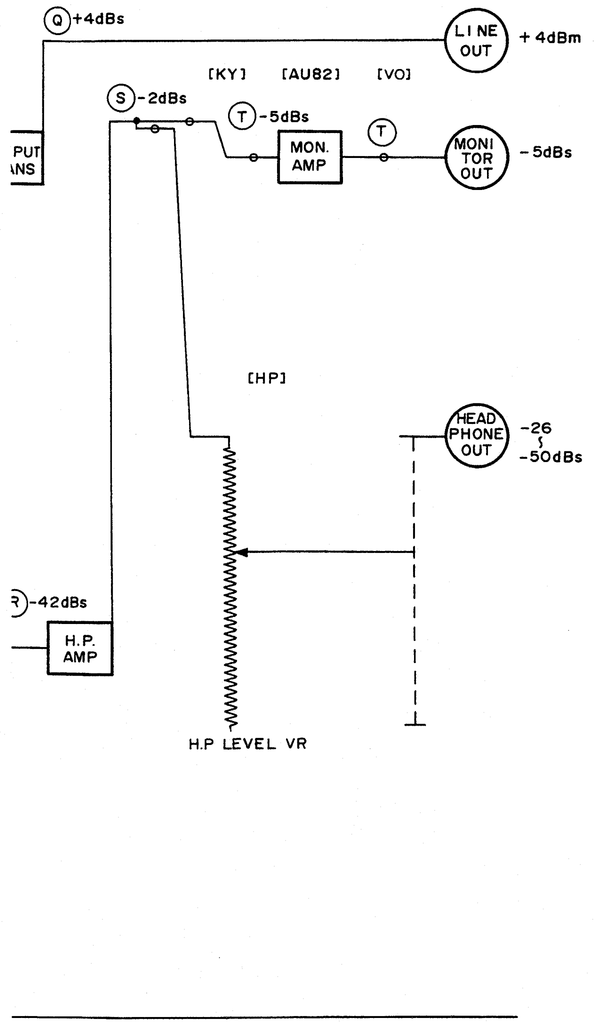

IC1 (3/4)
TP13
TP12
HIGH LEVEL STAGE DETECTOR
LOW LEVEL STAGE DETECTOR
SPECTRAL SKEW AMP
IC2 (1/2)
CH-1 REC AMP
IC2 (2/2)
CH-1 REC AMP
CH-1 REC SIG OUT
252-2
AU-82, 12-11
RV11 CH-1 DOLBY LEVEL
CH-1 DOLBY SIG OUT
252-3
AU-82, 12-10
IC1 (4/4)
TP113
TP112
IC102 (1/2)
CH-1 REC AMP
IC102 (2/2)
CH-2 REC AMP
CH-2 REC SIG OUT
252-11
AU-82, 12-2
RV111 CH-2 DOLBY LEVEL
CH-2 DOLBY SIG OUT
252-10
AU-82, 12-3
IC303
PHASE DET
IC304
IC305
IC306
TP314
TP315
Q306
Q307
INTEGRATOR DIFF AMP
RV315 CH-1 DC BALANCE
TP316
TP317
Q308
Q309
RV316 CH-2 DC BALANCE
TP318
IC302 (1/2)
LEVEL COMPARATOR
IC302 (2/2)
BUFFER
RV317 DOLBY DET LEVEL
Q205
PILOT MUTE
TP311
301 (1/4)
PILOT TONE PHASE
303
Q202
DOLBY PILOT SIGNAL AMP
CH-1 DOLBY PILOT OUT
252-8
AU-82, 12-7
RV211 CH-1 DOLBY PILOT TONE
IC203
IC3 (4/4)
Q207
PILOT MUTE
Q203
DOLBY PILOT SIGNAL AMP
CH-2 DOLBY PILOT OUT
252-7
AU-82, 12-6
RV212 CH-2 DOLBY PILOT TONE
Q206
251-5
AU-82, 17-2
IC203
C103 (4/4)
AU-89
VO-9600
VO-9600P

AUDIO LEVEL DIAGRAM

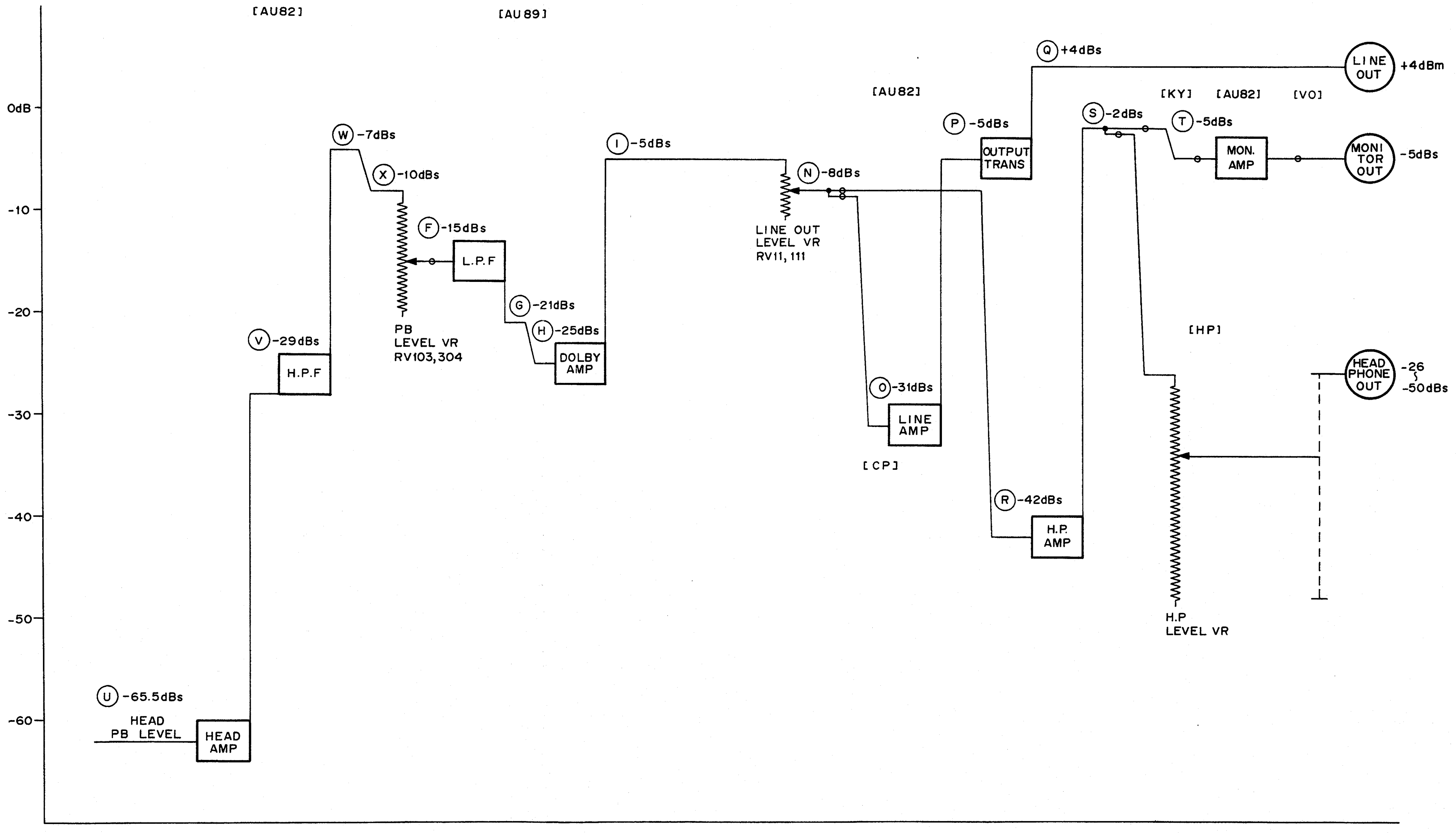
Audio Level Diagram EE, REC


[CP]
LINE IN
Ⓐ +4dBm
0dB
-10
-20
-30
-40
-50
-60
[VO]
TV IN
Ⓑ -20dBs
Ⓑ -23dBs
INPUT TRANS
[AU82] [MT]
Ⓓ
REC VR
[MC]
MIC IN
Ⓒ -60dBs
MIC AMP
Ⓔ -36dBs
LINE AMP
[AU82]
[AU89]
Ⓕ -9dBs
LPF
Ⓖ -16dBs
Ⓗ -20dBs
DOLBY AMP
Ⓘ -5dBs
-10dBs
Ⓙ [AU82]
Ⓚ -20dBs
REC AMP
REC LEVEL VR RV152,352
Ⓛ +4dBs
CON-STANT CUR-RENT
Ⓜ -4dBs
HEAD REC LEVEL
[AU82]
Ⓝ -8dBs
LINE OUT LEVEL VR RV11, 111
Ⓞ -31dBs
LINE AMP
[CP]
Ⓟ -5dBs
OUTPUT TRANS
Ⓠ +4dBs
LINE OUT
+4dBm
Ⓡ -42dBs
H.P. AMP
Ⓢ -2dBs
[KY]
[AU82]
[VO]
Ⓣ -5dBs
MON. AMP
Ⓣ
MONI TOR OUT
-5dBs
[HP]
HEAD PHONE OUT
-26 ~ -50dBs
H.P LEVEL VR

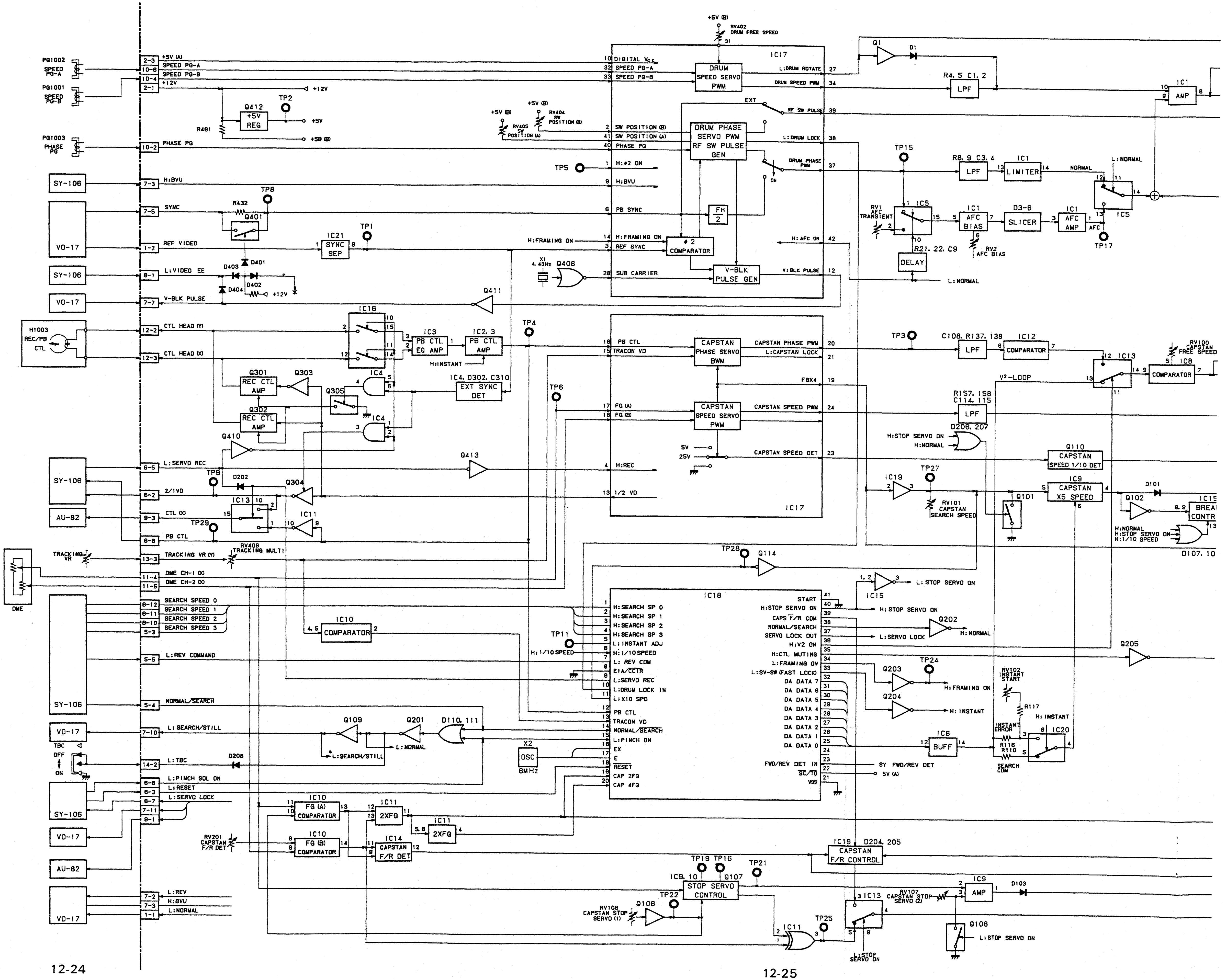

[AU82]
[AU89]
0dB
-10
-20
-30
-40
-50
-60
Ⓦ -7dBs
Ⓧ -10dBs
Ⓕ -15dBs
L.P.F
Ⓖ -21dBs
Ⓗ -25
DOL AM
PB LEVEL VR RV103,304
Ⓥ -29dBs
H.P.F
Ⓤ -65.5dBs
HEAD PB LEVEL
HEAD AMP

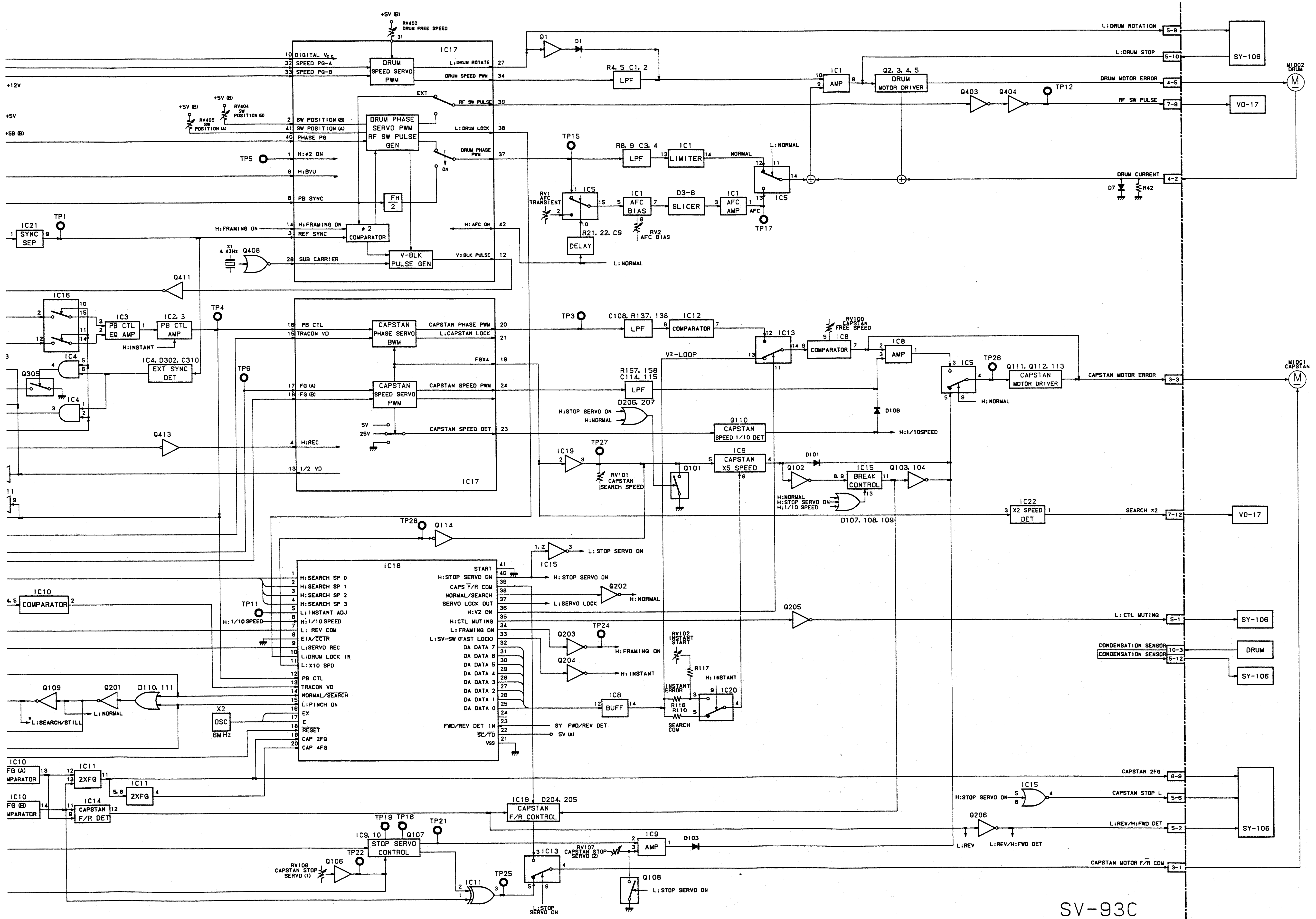

Q +4dBs
LINE OUT
+ 4dBm
[KY]
[AU82]
[VO]
S -2dBs
T -5dBs
MON. AMP
T
MONI TOR OUT
- 5dBs
PUT
ANS
[HP]
HEAD PHONE OUT
-26 ~ -50dBs
-42dBs
H.P. AMP
H.P LEVEL VR

Audio Level Diagram PB


[AU82]
[AU89]
0dB
-10
-20
-30
-40
-50
-60
U -65.5dBs
HEAD PB LEVEL
HEAD AMP
V -29dBs
H.P.F
W -7dBs
X -10dBs
F -15dBs
L.P.F
PB LEVEL VR RV103,304
G -21dBs
H -25dBs
DOLBY AMP
I -5dBs
N -8dBs
LINE OUT LEVEL VR RV11, 111
[AU82]
O -31dBs
LINE AMP
[CP]
P -5dBs
OUTPUT TRANS
Q +4dBs
LINE OUT
+4dBm
R -42dBs
H.P. AMP
[KY]
[AU82]
[VO]
S -2dBs
T -5dBs
MON. AMP
MONI TOR OUT
-5dBs
[HP]
HEAD PHONE OUT
-26 ~ -50dBs
H.P LEVEL VR

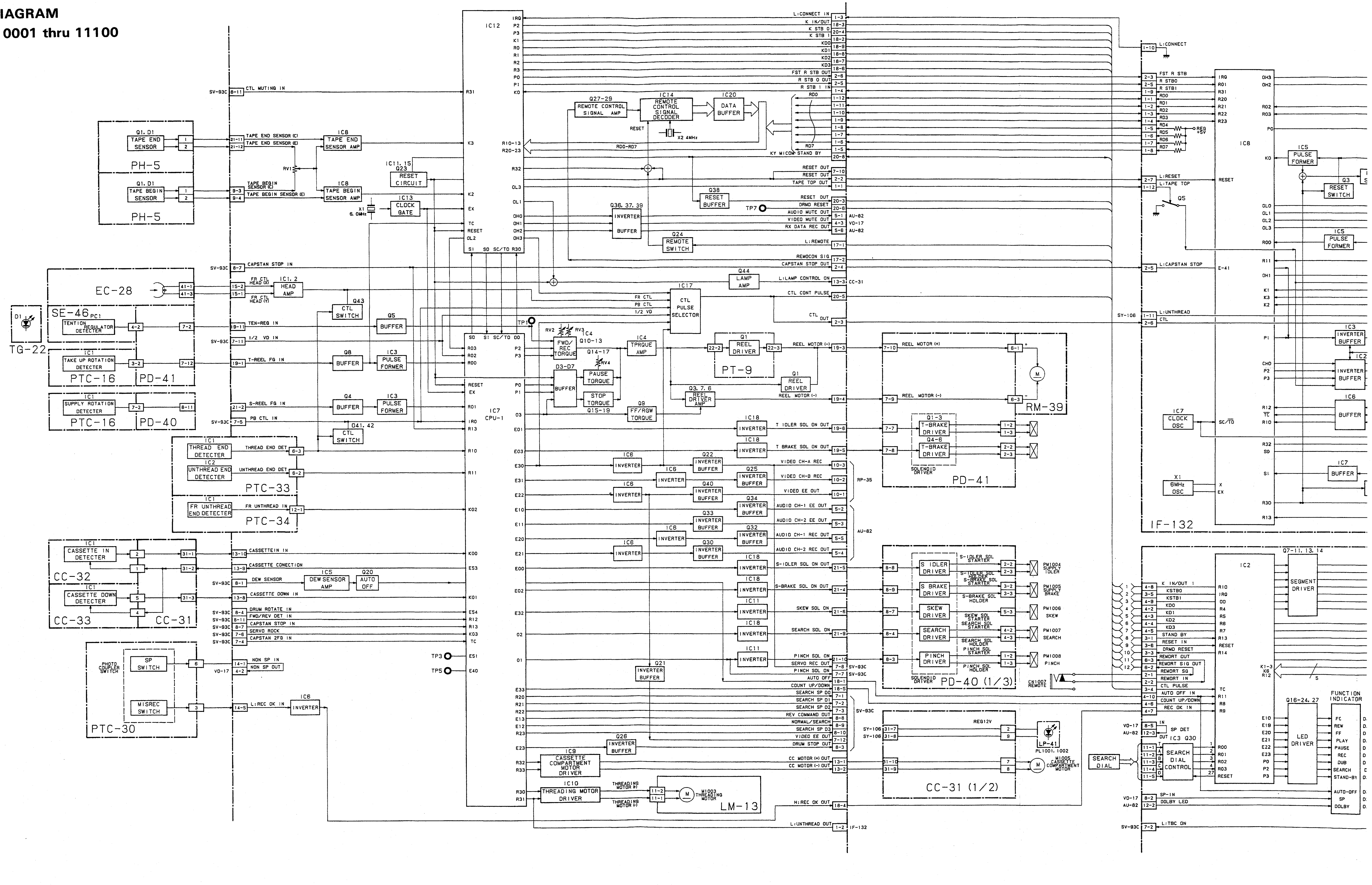
SERVO SYSTEM BLOCK DIAGRAM

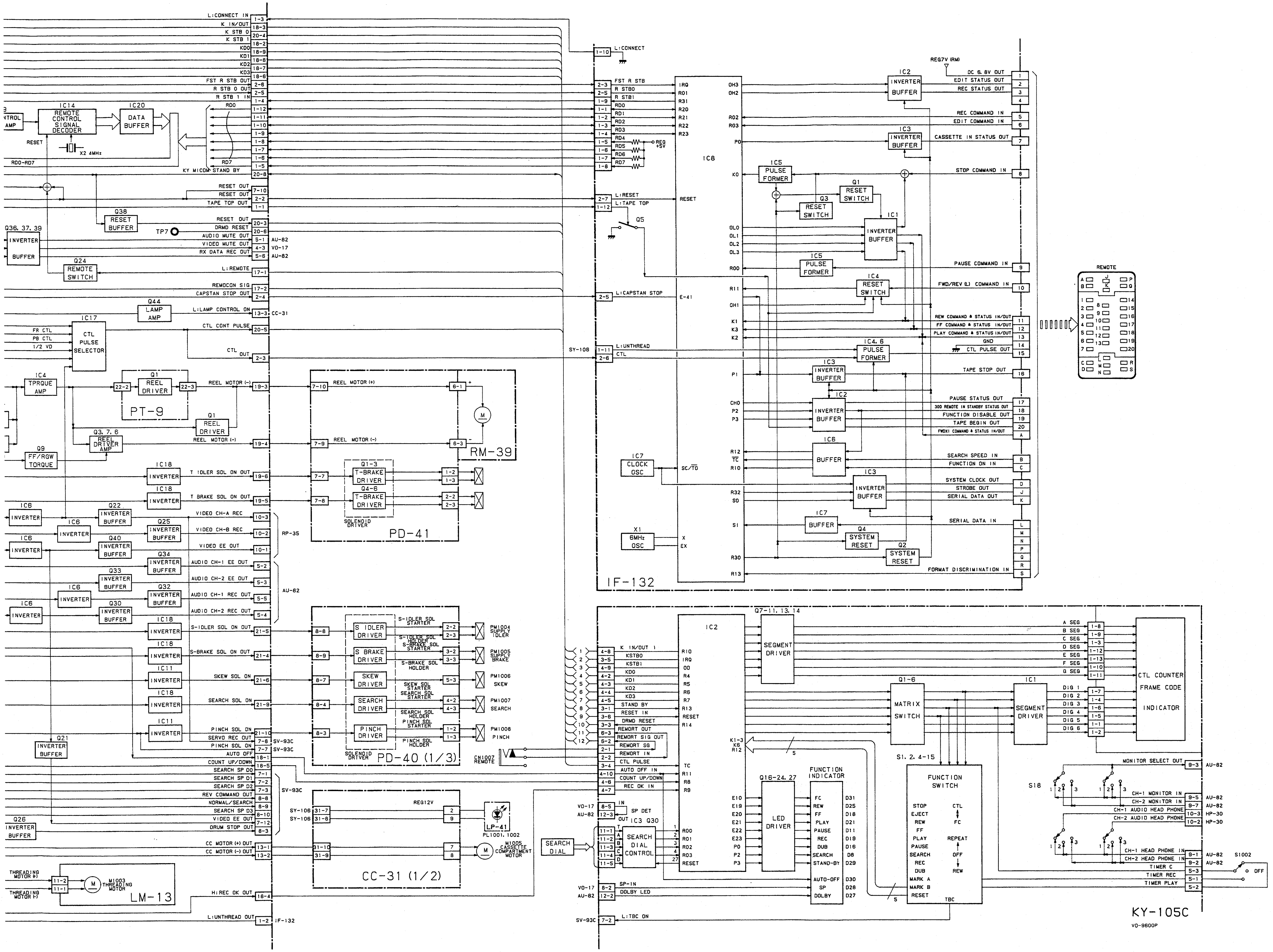

PG1002 SPEED PG-A
PG1001 SPEED PG-B
PG1003 PHASE PG
SY-106
VO-17
AU-82
H1003 REC/PB CTL
DME
TRACKING VR
TBC OFF ON
+5V (A)
SPEED PG-A
SPEED PG-B
+12V
PHASE PG
H:BVU
SYNC
REF VIDEO
L:VIDEO EE
V-BLK PULSE
CTL HEAD (Y)
CTL HEAD (X)
L:SERVO REC
2/1VD
CTL (X)
PB CTL
TRACKING VR (Y)
DME CH-1 (X)
DME CH-2 (X)
SEARCH SPEED 0
SEARCH SPEED 1
SEARCH SPEED 2
SEARCH SPEED 3
L:REV COMMAND
NORMAL/SEARCH
L:SEARCH/STILL
L:TBC
L:PINCH SOL ON
L:RESET
L:SERVO LOCK
L:REV
H:BVU
L:NORMAL
Q412 +5V REG
TP2
R481
+5V
+5B (B)
TP8
R432
Q401
D401
D402
D403
D404
IC21 SYNC SEP
TP1
Q411
IC16
IC3 PB CTL EQ AMP
IC2, 3 PB CTL AMP
H:INSTANT
TP4
Q301 REC CTL AMP
Q302 REC CTL AMP
Q303
Q305
IC4
IC4, D302, C310 EXT SYNC DET
Q410
Q413
TP9
D202
IC13
Q304
IC11
TP29
RV406 TRACKING MULTI
IC10 COMPARATOR
TP6
TP11
H:1/10 SPEED
Q109
Q201
D110, 111
L:SEARCH/STILL
L:NORMAL
D208
X2 OSC 6MHz
IC10 FG (A) COMPARATOR
IC10 FG (B) COMPARATOR
IC11 2XFG
IC11 2XFG
IC14 CAPSTAN F/R DET
RV201 CAPSTAN F/R DET
+5V (B)
RV402 DRUM FREE SPEED
RV405 SW POSITION (B)
RV404 SW POSITION (A)
TP5
H:FRAMING ON
X1 4.43Hz
Q408
IC17
DIGITAL Vss
SW POSITION (B)
SW POSITION (A)
H:#2 ON
H:BVU
PB SYNC
H:FRAMING ON
REF SYNC
SUB CARRIER
DRUM SPEED SERVO PWM
DRUM PHASE SERVO PWM RF SW PULSE GEN
EXT
FH/2
φ2 COMPARATOR
V-BLK PULSE GEN
L:DRUM ROTATE
DRUM SPEED PWM
RF SW PULSE
L:DRUM LOCK
DRUM PHASE PWM
H:AFC ON
V:BLK PULSE
PB CTL
TRACON VD
FG (A)
FG (B)
H:REC
1/2 VD
CAPSTAN PHASE SERVO BWM
CAPSTAN SPEED SERVO PWM
CAPSTAN PHASE PWM
L:CAPSTAN LOCK
FGX4
CAPSTAN SPEED PWM
CAPSTAN SPEED DET
5V
25V
IC18
H:SEARCH SP 0
H:SEARCH SP 1
H:SEARCH SP 2
H:SEARCH SP 3
L:INSTANT ADJ
H:1/10SPEED
L:REV COM
EIA/CCIR
L:SERVO REC
L:DRUM LOCK IN
L:X10 SPD
PB CTL
TRACON VD
NORMAL/SEARCH
L:PINCH ON
EX
E
RESET
CAP 2FG
CAP 4FG
START
H:STOP SERVO ON
CAPS F/R COM
NORMAL/SEARCH
SERVO LOCK OUT
H:V2 ON
H:CTL MUTING
L:FRAMING ON
L:SV-SW FAST LOCK
DA DATA 7
DA DATA 6
DA DATA 5
DA DATA 4
DA DATA 3
DA DATA 2
DA DATA 1
DA DATA 0
FWD/REV DET IN
SC/TO
VSS
TP28
Q114
IC15
L:STOP SERVO ON
H:STOP SERVO ON
Q202
L:SERVO LOCK
H:NORMAL
Q203
TP24
H:FRAMING ON
Q204
H:INSTANT
IC8 BUFF
SY FWD/REV DET
5V (A)
TP19
TP16
IC9, 10
Q107
STOP SERVO CONTROL
TP21
TP22
Q106
RV106 CAPSTAN STOP SERVO (1)
IC11
TP25
IC19, D204, 205 CAPSTAN F/R CONTROL
IC13
RV107 CAPSTAN STOP SERVO (2)
L:STOP SERVO ON
Q1
D1
R4, 5 C1, 2 LPF
IC1 AMP
TP15
R8, 9 C3, 4 LPF
IC1 LIMITER
NORMAL
L:NORMAL
IC5
RV1 AFC TRANSIENT
IC1 AFC BIAS
D3-6 SLICER
IC1 AFC AMP
AFC
TP17
R21, 22, C9 DELAY
RV2 AFC BIAS
L:NORMAL
TP3
C108, R137, 138 LPF
IC12 COMPARATOR
IC13
V2-LOOP
RV100 CAPSTAN FREE SPEED
IC8 COMPARATOR
R157, 158 C114, 115 LPF
D206, 207
H:STOP SERVO ON
H:NORMAL
Q110 CAPSTAN SPEED 1/10 DET
IC19
TP27
RV101 CAPSTAN SEARCH SPEED
Q101
IC9 CAPSTAN X5 SPEED
D101
Q102
IC15 BREAK CONTR
H:NORMAL
H:STOP SERVO ON
H:1/10 SPEED
D107, 10
Q205
RV102 INSTANT START
R117
H:INSTANT
INSTANT ERROR
R116
R110
SEARCH COM
IC20
IC9 AMP
D103
Q108
L:STOP SERVO ON


+5V (B)
RV402 DRUM FREE SPEED
IC17
DIGITAL Vcc
SPEED PG-A
SPEED PG-B
DRUM SPEED SERVO PWM
L:DRUM ROTATE
DRUM SPEED PWM
+12V
+5V
+5B (B)
RV405 SW POSITION (A)
RV404 SW POSITION (B)
SW POSITION (B)
SW POSITION (A)
PHASE PG
DRUM PHASE SERVO PWM RF SW PULSE GEN
EXT
RF SW PULSE
L:DRUM LOCK
DRUM PHASE PWM
ON
TP5
H:#2 ON
H:BVU
PB SYNC
FH/2
H:FRAMING ON
REF SYNC
#2 COMPARATOR
H:AFC ON
IC21 SYNC SEP
TP1
X1 4.43Hz
Q408
SUB CARRIER
V-BLK PULSE GEN
V:BLK PULSE
Q411
Q1
D1
R4.5 C1.2
LPF
TP15
R8.9 C3.4
IC1 LIMITER
NORMAL
L:NORMAL
RV1 AFC TRANSIENT
IC5
IC1 AFC BIAS
RV2 AFC BIAS
D3-6 SLICER
IC1 AFC AMP
AFC
TP17
R21.22.C9
DELAY
L:NORMAL
IC1 AMP
Q2.3.4.5 DRUM MOTOR DRIVER
Q403
Q404
TP12
L:DRUM ROTATION
L:DRUM STOP
DRUM MOTOR ERROR
RF SW PULSE
DRUM CURRENT
D7
R42
5-9
5-10
4-5
7-9
4-2
SY-106
VO-17
M1002 DRUM
M
IC16
IC3 PB CTL EQ AMP
IC2.3 PB CTL AMP
H:INSTANT
TP4
IC4
Q305
IC4.D302.C310 EXT SYNC DET
TP6
PB CTL
TRACON VD
CAPSTAN PHASE SERVO BWM
CAPSTAN PHASE PWM
L:CAPSTAN LOCK
FGx4
FG (A)
FG (B)
CAPSTAN SPEED SERVO PWM
CAPSTAN SPEED PWM
5V
25V
CAPSTAN SPEED DET
Q413
H:REC
1/2 VD
IC17
TP3
C108.R137.138
IC12 COMPARATOR
IC13
V²-LOOP
RV100 CAPSTAN FREE SPEED
IC8 COMPARATOR
IC8 AMP
IC5
TP26
Q111.Q112.113 CAPSTAN MOTOR DRIVER
CAPSTAN MOTOR ERROR
3-3
M1001 CAPSTAN
H:NORMAL
R157.158 C114.115
D206.207
H:STOP SERVO ON
H:NORMAL
Q110 CAPSTAN SPEED 1/10 DET
D106
H:1/10SPEED
IC19
TP27
RV101 CAPSTAN SEARCH SPEED
Q101
IC9 CAPSTAN X5 SPEED
D101
Q102
IC15 BREAK CONTROL
Q103.104
H:NORMAL
H:STOP SERVO ON
H:1/10 SPEED
D107.108.109
IC22 X2 SPEED DET
SEARCH x2
7-12
VO-17
TP28
Q114
IC15
L:STOP SERVO ON
IC18
START
H:STOP SERVO ON
CAPS F/R COM
NORMAL/SEARCH
SERVO LOCK OUT
H:V2 ON
H:CTL MUTING
L:FRAMING ON
L:SV-SW (FAST LOCK)
DA DATA 7
DA DATA 6
DA DATA 5
DA DATA 4
DA DATA 3
DA DATA 2
DA DATA 1
DA DATA 0
FWD/REV DET IN
SC/TO
VSS
H:SEARCH SP 0
H:SEARCH SP 1
H:SEARCH SP 2
H:SEARCH SP 3
L:INSTANT ADJ
H:1/10 SPEED
L:REV COM
EIA/CCIR
L:SERVO REC
L:DRUM LOCK IN
L:X10 SPD
PB CTL
TRACON VD
NORMAL/SEARCH
L:PINCH ON
EX
E
RESET
CAP 2FG
CAP 4FG
IC10 COMPARATOR
TP11
H:1/10 SPEED
X2 OSC 6MHz
Q109
Q201
D110.111
L:NORMAL
L:SEARCH/STILL
H:STOP SERVO ON
Q202
H:NORMAL
L:SERVO LOCK
Q205
L:CTL MUTING
5-1
SY-106
Q203
TP24
H:FRAMING ON
Q204
H:INSTANT
RV102 INSTANT START
R117
H:INSTANT
INSTANT ERROR
R116 R110
SEARCH COM
IC8 BUFF
IC20
CONDENSATION SENSOR
CONDENSATION SENSOR
10-3
5-12
DRUM
SY-106
SY FWD/REV DET
5V (A)
IC10 FG (A) COMPARATOR
IC10 FG (B) COMPARATOR
IC11 2XFG
IC11 2XFG
IC14 CAPSTAN F/R DET
IC19 CAPSTAN F/R CONTROL
D204.205
CAPSTAN 2FG
6-9
IC15
H:STOP SERVO ON
CAPSTAN STOP L
5-6
Q206
L:REV/H:FWD DET
5-2
L:REV
L:REV/H:FWD DET
SY-106
TP19 TP16
TP21
IC9.10 STOP SERVO CONTROL
Q107
TP22
RV106 CAPSTAN STOP SERVO (1)
Q106
IC11
TP25
IC13
RV107 CAPSTAN STOP SERVO (2)
IC9 AMP
D103
Q108
L:STOP SERVO ON
L:STOP SERVO ON
CAPSTAN MOTOR F/R COM
3-1

SV-93C
VO-9600P (1)

SYSTEM CONTROL BLOCK DIAGRAM
EK; S/N 10001 thru 11100


IC12
Q1, D1 TAPE END SENSOR
PH-5
Q1, D1 TAPE BEGIN SENSOR
PH-5
IC8 TAPE END SENSOR AMP
IC8 TAPE BEGIN SENSOR AMP
RV1
IC11, 15 Q23 RESET CIRCUIT
IC13 CLOCK GATE
X1 6.0MHz
EC-28
SE-46
TG-22
TENTION REGULATOR DETECTER
TAKE UP ROTATION DETECTER
PTC-16
PD-41
SUPPLY ROTATION DETECTER
PTC-16
PD-40
IC1, 2 HEAD AMP
Q43 CTL SWITCH
Q5 BUFFER
Q8 BUFFER
IC3 PULSE FORMER
Q4 BUFFER
IC3 PULSE FORMER
Q41, 42 CTL SWITCH
THREAD END DETECTER
UNTHREAD END DETECTER
PTC-33
FR UNTHREAD END DETECTER
PTC-34
CASSETTE IN DETECTER
CC-32
CASSETTE DOWN DETECTER
CC-33
CC-31
IC5 DEW SENSOR AMP
Q20 AUTO OFF
PHOTO COUPLER SWITCH
SP SWITCH
MISREC SWITCH
PTC-30
IC6 INVERTER
IC7 CPU-1
TP1
TP3
TP5
Q27-29 REMOTE CONTROL SIGNAL AMP
IC14 REMOTE CONTROL SIGNAL DECODER
IC20 DATA BUFFER
X2 4MHz
Q38 RESET BUFFER
TP7
Q36, 37, 39 INVERTER BUFFER
Q24 REMOTE SWITCH
Q44 LAMP AMP
IC17 CTL PULSE SELECTOR
IC4 Q10-13 FWD/REC TORQUE
D3-D7 BUFFER
Q14-17 PAUSE TORQUE
STOP TORQUE Q15-19
IC4 TPRQUE AMP
Q9 FF/RGW TORQUE
Q1 REEL DRIVER
PT-9
Q1 REEL DRIVER
Q3, 7, 6 REEL DRIVER AMP
IC18 INVERTER
IC6 INVERTER
Q22 INVERTER BUFFER
Q25 INVERTER BUFFER
Q40 INVERTER BUFFER
Q34 INVERTER BUFFER
Q33 INVERTER BUFFER
Q32 INVERTER BUFFER
Q30 INVERTER BUFFER
IC11 INVERTER
Q21 INVERTER BUFFER
Q26 INVERTER BUFFER
IC9 CASSETTE COMPARTMENT MOTOR DRIVER
IC10 THREADING MOTOR DRIVER
M1003 THREADING MOTOR
LM-13
RP-35
AU-82
VO-17
CC-31
SV-93C
IF-132
RM-39
Q1-3 T-BRAKE DRIVER
Q4-6 T-BRAKE DRIVER
SOLENOID DRIVER
PD-41
S IDLER DRIVER
S BRAKE DRIVER
SKEW DRIVER
SEARCH DRIVER
PINCH DRIVER
PD-40 (1/3)
PM1004 SUPPLY IDLER
PM1005 SUPPLY BRAKE
PM1006 SKEW
PM1007 SEARCH
PM1008 PINCH
CN1007 REMOTE
REG12V
LP-41 PL1001, 1002
M1005 CASSETTE COMPARTMENT MOTOR
CC-31 (1/2)
IC8
IC5 PULSE FORMER
Q3 RESET SWITCH
Q5
IC5 PULSE FORMER
IC3 INVERTER BUFFER
IC2 INVERTER BUFFER
IC6 BUFFER
IC7 CLOCK OSC
IC7 BUFFER
X1 6MHz OSC
IF-132
IC2
Q7-11, 13, 14 SEGMENT DRIVER
IC3 Q30 SEARCH DIAL CONTROL
SEARCH DIAL
Q16-24, 27 LED DRIVER
FUNCTION INDICATOR
FC
REW
FF
PLAY
PAUSE
REC
DUB
SEARCH
STAND-BY
AUTO-OFF
SP
DOLBY


IC14 REMOTE CONTROL SIGNAL DECODER
IC20 DATA BUFFER
X2 4MHz
RESET
RD0-RD7
KY MICOM STAND BY
Q38 RESET BUFFER
TP7
Q36, 37, 39 INVERTER BUFFER
Q24 REMOTE SWITCH
Q44 LAMP AMP
IC17 CTL PULSE SELECTOR
FR CTL
PB CTL
1/2 VD
IC4 TPRQUE AMP
Q1 REEL DRIVER
PT-9
Q1 REEL DRIVER
Q3, 7, 6 REEL DRIVER AMP
Q9 FF/REW TORQUE
IC18 INVERTER
IC6 INVERTER
Q22 INVERTER BUFFER
Q25 INVERTER BUFFER
Q40 INVERTER BUFFER
Q34 INVERTER BUFFER
Q33 INVERTER BUFFER
Q32 INVERTER BUFFER
Q30 INVERTER BUFFER
IC11 INVERTER
Q21 INVERTER BUFFER
Q26 INVERTER BUFFER
M1003 THREADING MOTOR
LM-13
RM-39
Q1-3 T-BRAKE DRIVER
Q4-6 T-BRAKE DRIVER
SOLENOID DRIVER
PD-41
S IDLER DRIVER
S BRAKE DRIVER
SKEW DRIVER
SEARCH DRIVER
PINCH DRIVER
PD-40 (1/3)
PM1004 SUPPLY IDLER
PM1005 SUPPLY BRAKE
PM1006 SKEW
PM1007 SEARCH
PM1008 PINCH
CN1007 REMOTE
REG12V
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Q1 RESET SWITCH
IC1 INVERTER BUFFER
IC4 RESET SWITCH
IC4, 6 PULSE FORMER
IC3 INVERTER BUFFER
IC2 INVERTER BUFFER
IC6 BUFFER
IC7 CLOCK OSC
X1 6MHz OSC
IC7 BUFFER
Q4 SYSTEM RESET
Q2 SYSTEM RESET
Q5
REG7V (RM)
DC 6.8V OUT
EDIT STATUS OUT
REC STATUS OUT
REC COMMAND IN
EDIT COMMAND IN
CASSETTE IN STATUS OUT
STOP COMMAND IN
PAUSE COMMAND IN
FWD/REV (L) COMMAND IN
REW COMMAND & STATUS IN/OUT
FF COMMAND & STATUS IN/OUT
PLAY COMMAND & STATUS IN/OUT
GND
CTL PULSE OUT
TAPE STOP OUT
PAUSE STATUS OUT
300 REMOTE IN STANDBY STATUS OUT
FUNCTION DISABLE OUT
TAPE BEGIN OUT
FWD(K) COMMAND & STATUS IN/OUT
SEARCH SPEED IN
FUNCTION ON IN
SYSTEM CLOCK OUT
STROBE OUT
SERIAL DATA OUT
SERIAL DATA IN
FORMAT DISCRIMINATION IN
REMOTE
IC2
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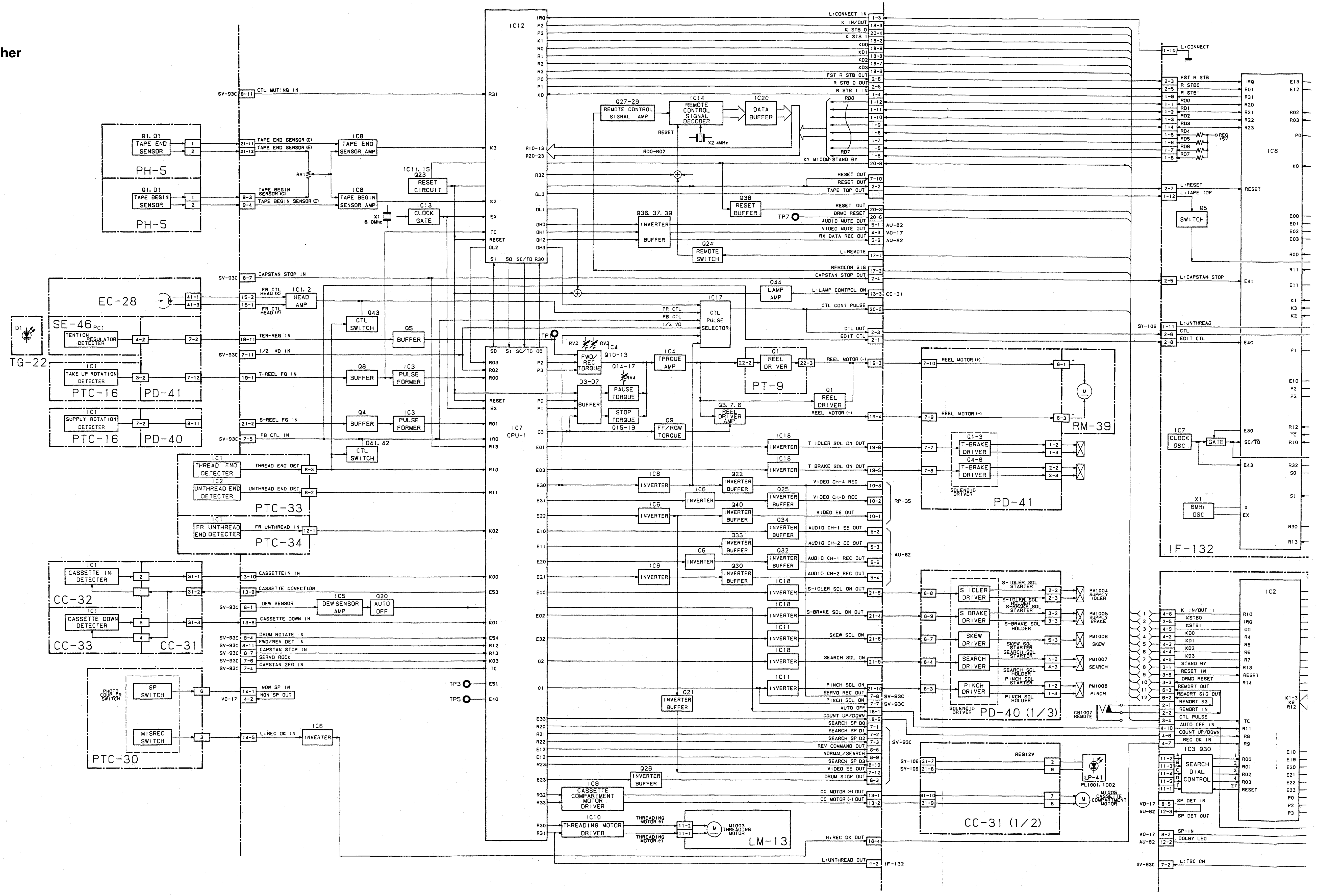
Q1-6 MATRIX SWITCH
IC1 SEGMENT DRIVER
CTL COUNTER FRAME CODE INDICATOR
Q16-24, 27 LED DRIVER
FUNCTION INDICATOR
S1, 2, 4-15 FUNCTION SWITCH
STOP EJECT REW FF PLAY PAUSE SEARCH REC DUB MARK A MARK B RESET
CTL FC REPEAT OFF REW
SEARCH DIAL
IC3 Q30 SEARCH DIAL CONTROL
S18
MONITOR SELECT OUT
CH-1 MONITOR IN
CH-2 MONITOR IN
CH-1 AUDIO HEAD PHONE
CH-2 AUDIO HEAD PHONE
CH-1 HEAD PHONE IN
CH-2 HEAD PHONE IN
TIMER C
TIMER REC
TIMER PLAY
S1002
OFF
HP-30
KY-105C
VO-9600P

SYSTEM CONTROL
BLOCK DIAGRAM
EK;S/N 11101 and higher


IC12
IC7
CPU-1
IC14
REMOTE CONTROL SIGNAL DECODER
IC20
DATA BUFFER
Q27-29
REMOTE CONTROL SIGNAL AMP
X2 4MHz
PH-5
Q1, D1
TAPE END SENSOR
TAPE BEGIN SENSOR
IC8
TAPE END SENSOR AMP
TAPE BEGIN SENSOR AMP
IC11, 15
Q23
RESET CIRCUIT
IC13
CLOCK GATE
X1 6.0MHz
Q36, 37, 39
INVERTER
BUFFER
Q38
RESET BUFFER
TP7
Q24
REMOTE SWITCH
EC-28
SE-46
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TG-22
PTC-16
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SUPPLY ROTATION DETECTER
PD-41
PD-40
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Q43
CTL SWITCH
Q5
BUFFER
Q8
BUFFER
IC3
PULSE FORMER
Q4
BUFFER
Q41, 42
CTL SWITCH
IC17
CTL PULSE SELECTOR
Q44
LAMP AMP
IC4
FWD/REC TORQUE
Q10-13
Q14-17
PAUSE TORQUE
D3-D7
BUFFER
STOP TORQUE
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Q9
FF/RGW TORQUE
Q1
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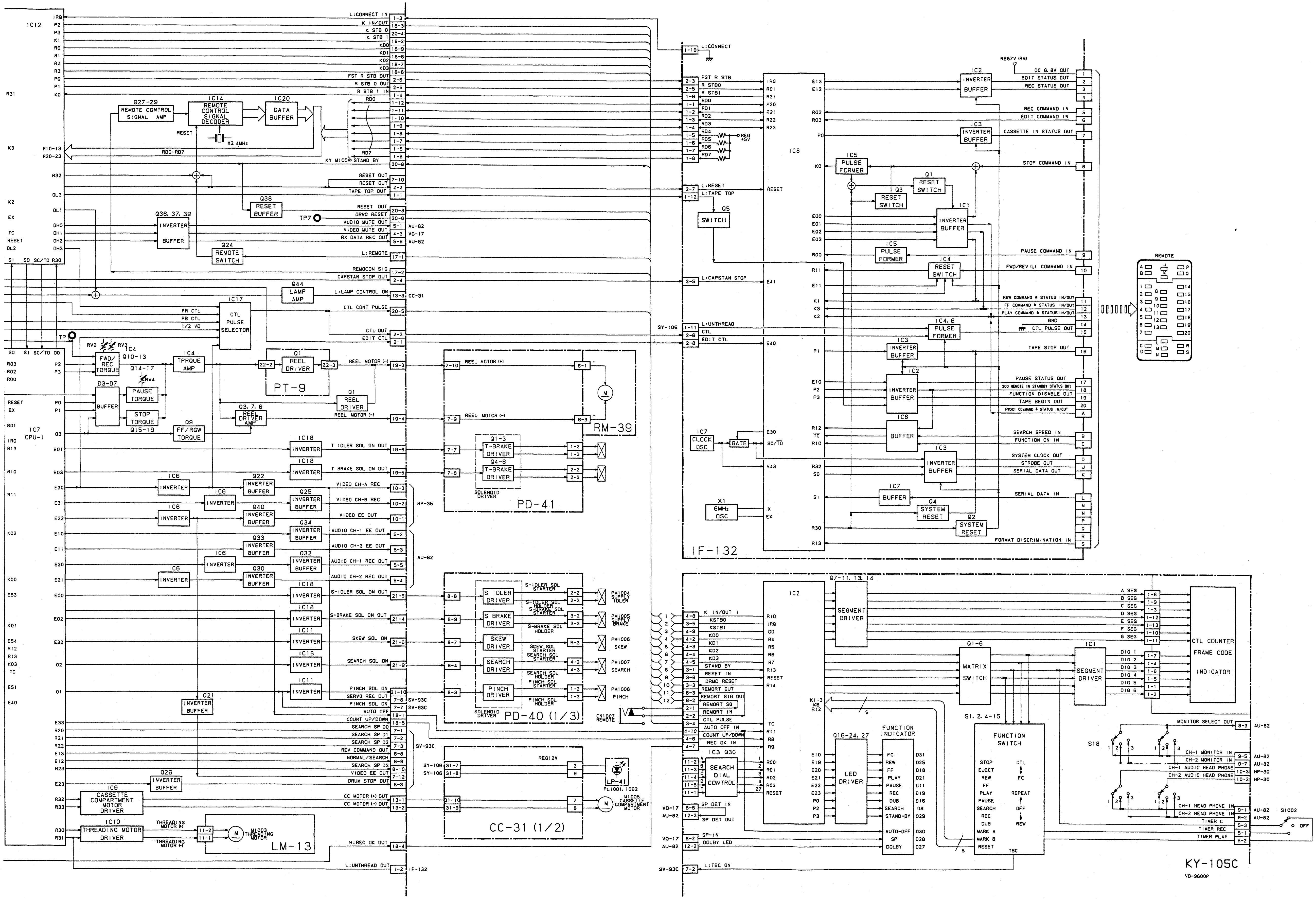
PT-9
Q3, 7, 6
REEL DRIVER
RM-39
REEL MOTOR (+)
REEL MOTOR (-)
PTC-33
THREAD END DETECTER
UNTHREAD END DETECTER
PTC-34
FR UNTHREAD END DETECTER
IC18
INVERTER
IC6
INVERTER
Q22
INVERTER BUFFER
Q25
Q40
Q34
Q33
Q32
Q30
RP-35
AU-82
T-BRAKE DRIVER
Q1-3
Q4-6
SOLENOID DRIVER
CC-32
CASSETTE IN DETECTER
CC-33
CASSETTE DOWN DETECTER
CC-31
IC5
DEW SENSOR AMP
Q20
AUTO OFF
PTC-30
PHOTO COUPLER SWITCH
SP SWITCH
MISREC SWITCH
TP3
TP5
IC11
Q21
INVERTER BUFFER
Q26
INVERTER BUFFER
IC9
CASSETTE COMPARTMENT MOTOR DRIVER
IC10
THREADING MOTOR DRIVER
LM-13
M1003 THREADING MOTOR
S IDLER DRIVER
S BRAKE DRIVER
SKEW DRIVER
SEARCH DRIVER
PINCH DRIVER
PD-40 (1/3)
PM1004 SUPPLY IDLER
PM1005 SUPPLY BRAKE
PM1006 SKEW
PM1007 SEARCH
PM1008 PINCH
CN1007 REMOTE
LP-41
PL1001, 1002
M1005 CASSETTE COMPARTMENT MOTOR
CC-31 (1/2)
REG12V
IF-132
IC8
Q5
SWITCH
IC7
CLOCK OSC
GATE
X1 6MHz OSC
IC2
IC3 Q30
SEARCH DIAL CONTROL
SV-93C
SY-106
VD-17
AU-82
IF-132


IC12
IC7 CPU-1
Q27-29 REMOTE CONTROL SIGNAL AMP
IC14 REMOTE CONTROL SIGNAL DECODER
IC20 DATA BUFFER
X2 4MHz
Q38 RESET BUFFER
TP7
Q36, 37, 39 INVERTER BUFFER
Q24 REMOTE SWITCH
Q44 LAMP AMP
IC17 CTL PULSE SELECTOR
FR CTL
PB CTL
1/2 VD
TP
RV2
RV3
IC4 FWD/REC TORQUE
Q10-13
IC4 TORQUE AMP
Q14-17
RV4
PAUSE TORQUE
D3-D7 BUFFER
STOP TORQUE
Q15-19
Q9 FF/REW TORQUE
Q3, 7, 6 REEL DRIVER AMP
Q1 REEL DRIVER
PT-9
REEL MOTOR (+)
REEL MOTOR (-)
RM-39
IC18 INVERTER
T IDLER SOL ON OUT
T BRAKE SOL ON OUT
Q1-3 T-BRAKE DRIVER
Q4-6 T-BRAKE DRIVER
SOLENOID DRIVER
PD-41
IC6 INVERTER
Q22 INVERTER BUFFER
Q25 INVERTER BUFFER
Q40 INVERTER BUFFER
Q34 INVERTER BUFFER
Q33 INVERTER BUFFER
Q32 INVERTER BUFFER
Q30 INVERTER BUFFER
VIDEO CH-A REC
VIDEO CH-B REC
VIDEO EE OUT
AUDIO CH-1 EE OUT
AUDIO CH-2 EE OUT
AUDIO CH-1 REC OUT
AUDIO CH-2 REC OUT
RP-35
AU-82
S IDLER DRIVER
S BRAKE DRIVER
SKEW DRIVER
SEARCH DRIVER
PINCH DRIVER
PM1004 SUPPLY IDLER
PM1005 SUPPLY BRAKE
PM1006 SKEW
PM1007 SEARCH
PM1008 PINCH
PD-40 (1/3)
CN1007 REMOTE
Q21 INVERTER BUFFER
Q26 INVERTER BUFFER
SV-93C
SY-106
REG12V
LP-41
PL1001, 1002
M1005 CASSETTE COMPARTMENT MOTOR
CC-31 (1/2)
IC9 CASSETTE COMPARTMENT MOTOR DRIVER
IC10 THREADING MOTOR DRIVER
M1003 THREADING MOTOR
LM-13
H:REC OK OUT
L:UNTHREAD OUT
IF-132
L:CONNECT
IC8
IC2 INVERTER BUFFER
IC3 INVERTER BUFFER
IC5 PULSE FORMER
Q1 RESET SWITCH
Q3 RESET SWITCH
IC1 INVERTER BUFFER
Q5 SWITCH
IC4 RESET SWITCH
IC4, 6 PULSE FORMER
IC6 BUFFER
IC7 CLOCK OSC
GATE
X1 6MHz OSC
IC7 BUFFER
Q4 SYSTEM RESET
Q2 SYSTEM RESET
REG7V (RM)
DC 6.6V OUT
EDIT STATUS OUT
REC STATUS OUT
REC COMMAND IN
EDIT COMMAND IN
CASSETTE IN STATUS OUT
STOP COMMAND IN
PAUSE COMMAND IN
FWD/REV (L) COMMAND IN
CTL PULSE OUT
TAPE STOP OUT
PAUSE STATUS OUT
FUNCTION DISABLE OUT
TAPE BEGIN OUT
SEARCH SPEED IN
FUNCTION ON IN
SYSTEM CLOCK OUT
STROBE OUT
SERIAL DATA OUT
SERIAL DATA IN
FORMAT DISCRIMINATION IN
REMOTE
Q7-11, 13, 14 SEGMENT DRIVER
IC2
Q1-6 MATRIX SWITCH
IC1 SEGMENT DRIVER
CTL COUNTER FRAME CODE INDICATOR
IC3 Q30 SEARCH DIAL CONTROL
Q16-24, 27 LED DRIVER
FUNCTION INDICATOR
S1, 2, 4-15 FUNCTION SWITCH
S18
S1002
MONITOR SELECT OUT
CH-1 MONITOR IN
CH-2 MONITOR IN
CH-1 AUDIO HEAD PHONE
CH-2 AUDIO HEAD PHONE
CH-1 HEAD PHONE IN
CH-2 HEAD PHONE IN
TIMER C
TIMER REC
TIMER PLAY
OFF
KY-105C
VO-9600P

SECTION 13

SEMICONDUCTOR ELECTRODES

ICs, transistors and diodes whoses functions are equivalent are described here. Therefore, incompatible device names may be described together. For parts replacement, refer to the Spare Parts section in this manual.

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The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

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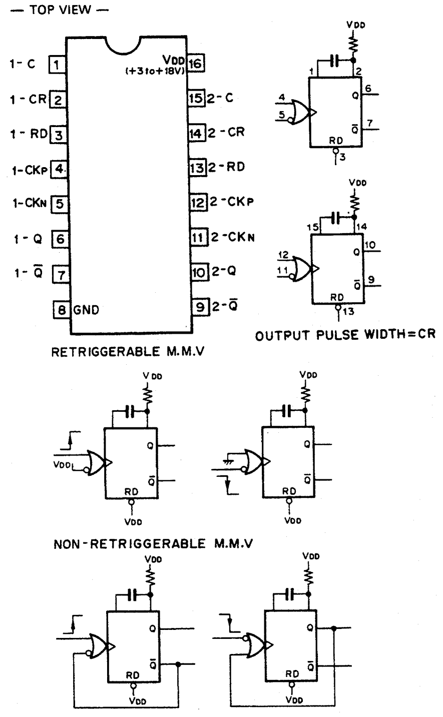
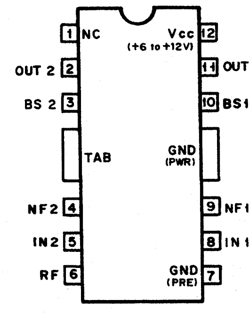
TLY255:YELLOW 13-14

U05E 13-14

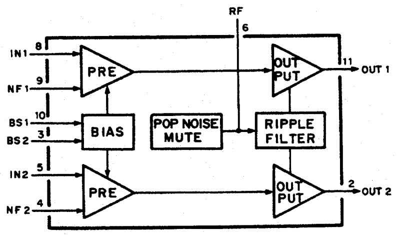
HD14538BP (HITACHI)
C-MOS DUAL RETRIGGERABLE/NON-RETRIGGERABLE
MONOSTABLE MULTIVIBRATOR
— TOP VIEW —


1-C
1-CR
1-RD
1-CKP
1-CKN
1-Q
1-Q̄
GND
VDD (+3 to +18V)
2-C
2-CR
2-RD
2-CKP
2-CKN
2-Q
2-Q̄
VDD
RD
RETRIGGERABLE M.M.V
OUTPUT PULSE WIDTH=CR
NON-RETRIGGERABLE M.M.V

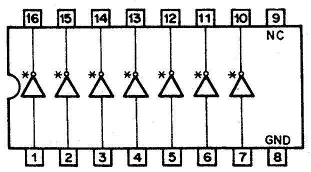
LA4550 (SANYO)
2CH AF POWER AMP
— TOP VIEW —


NC
Vcc (+6 to +12V)
OUT 2
OUT 1
BS 2
BS 1
TAB
GND (PWR)
NF 2
NF 1
IN 2
IN 1
RF
GND (PRE)

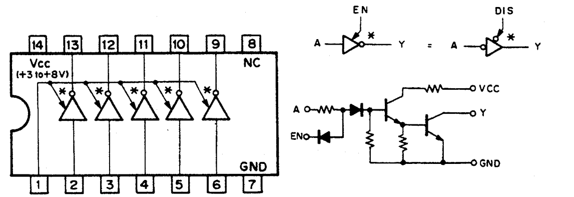
BS1,BS2 ;BOOTSTRAP CAPACITOR
IN1,IN2 ;INPUTS
NF1,NF2 ;NEGATIVE FEEDBACK CONTROL
OUT1,OUT2; OUTPUTS
RF ;RIPPLE FILTER


IN1
NF1
BS1
BS2
IN2
NF2
RF
PRE
BIAS
POP NOISE MUTE
RIPPLE FILTER
OUT PUT
OUT 1
OUT 2

M54517P (MITSUBISHI)
INVERTER WITH OPEN-COLLECTOR
(DARLINGTON-CONNECTED TRANSISTOR ARRAY)
— TOP VIEW —



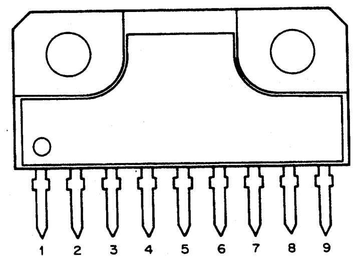
M54529AP (MITSUBISHI)
TRANSISTOR ARRAY
— TOP VIEW —

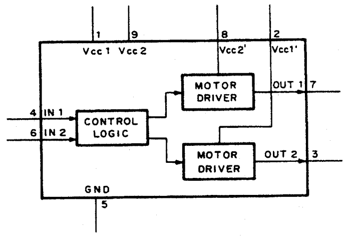

Vcc (+3 to +8V)
NC
GND
ENABLE
EN
DIS
A
Y
VCC
GND

A	EN	Y
0	1	1
1	1	0
X	0	1

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
✱; OPEN COLLECTOR

M54543L (MITSUBISHI)
BI-DIRECTIONAL MOTOR DRIVER
— SIDE VIEW —

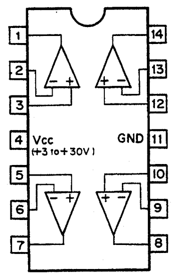



Vcc1
Vcc2
Vcc2'
Vcc1'
IN 1
IN 2
CONTROL LOGIC
MOTOR DRIVER
MOTOR DRIVER
OUT 1
OUT 2
GND

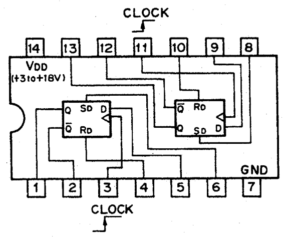
IN 1	IN 2	OUT 1	OUT 2	MODE
0	0	Z	Z	NO OPERATION
1	0	1	0	ROTATION
0	1	0	1	REVERSE ROTATION
1	1	0	0	BRAKE

0 : LOW LEVEL
1 : HIGH LEVEL
Z : HIGH IMPEDANCE

MB3614 (FUJITSU)
QUAD. OP AMPLIFIER
— TOP VIEW —


Vcc (+3 to +30V)
GND

MB84013B (FUJITSU)
C-MOS D-TYPE FLIP-FLOP WITH DIRECT SET/RESET
— TOP VIEW —


CLOCK
VDD (+3 to +18V)
SD
RD
D
Q
GND
CLOCK

DIRECT R-S FLIP FLOP

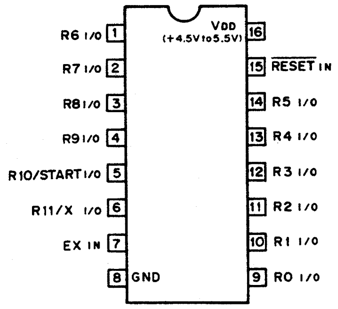
SD	RD	Q	Q̄
0	0	Qn	Q̄n
0	1	0	1
1	0	1	0
1	1	1	1

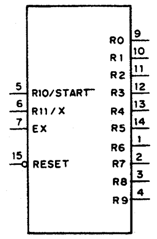
D-TYPE FLIP FLOP

CKn	CKn+1
D	Q
0	0
1	1

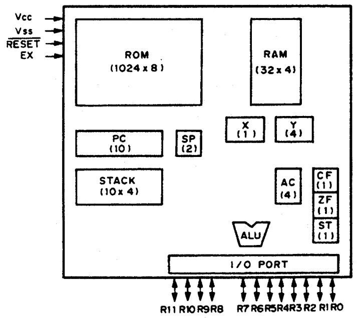
0:LOW LEVEL
1:HIGH LEVEL
CLOCK CK;
CKn; BEFORE CLOCK
CKn+1; AFTER CLOCK

MB88201-173N (FUJITSU)
C-MOS 4 BIT MICROCOMPUTER
— TOP VIEW —

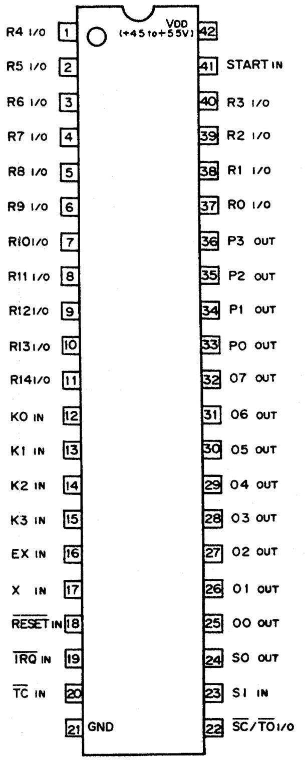

R6 I/O
R7 I/O
R8 I/O
R9 I/O
R10/START I/O
R11/X I/O
EX IN
GND
VDD (+4.5V to 5.5V)
RESET IN
R5 I/O
R4 I/O
R3 I/O
R2 I/O
R1 I/O
R0 I/O

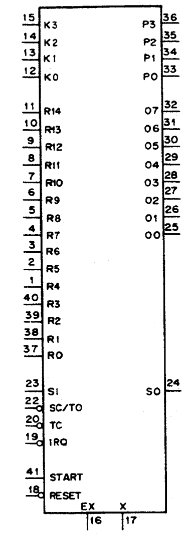

R10/START
R11/X
EX
RESET
R0
R1
R2
R3
R4
R5
R6
R7
R8
R9

EX ; EXTERNAL X'TAL IN
R0-R11 ; I/O PORT(R) IN/OUT
RESET ; RESET IN
START ; STANDBY RELEASE IN
R11/X ; EXT CLOCK IN/INT CLOCK OUT

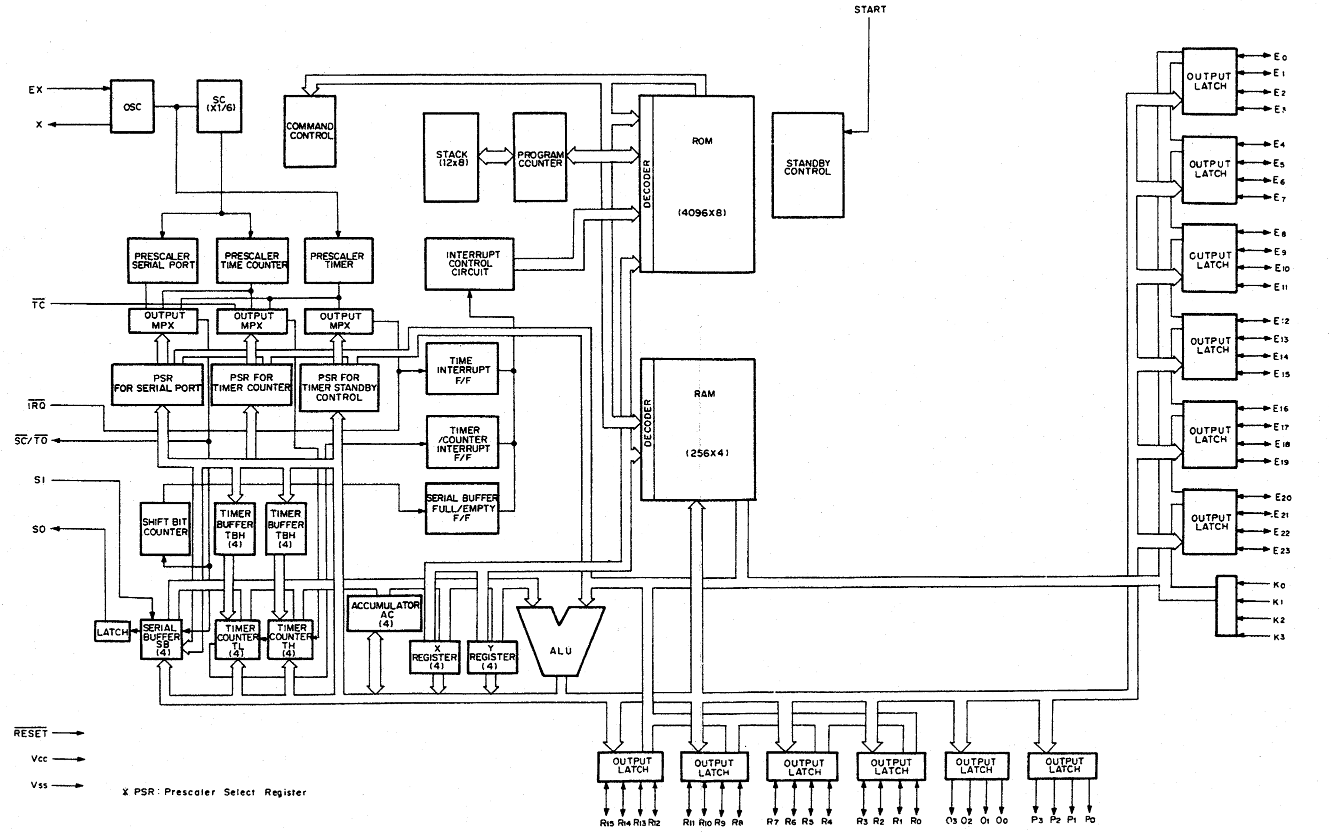

Vcc
Vss
RESET
EX
ROM (1024×8)
RAM (32×4)
PC (10)
SP (2)
X (1)
Y (4)
STACK (10×4)
AC (4)
CF (1)
ZF (1)
ST (1)
ALU
I/O PORT
R11 R10 R9 R8
R7 R6 R5 R4 R3 R2 R1 R0

MB88505P (FUJITSU)
C-MOS 4-BIT ONE-CHIP MICROCOMPUTER
— TOP VIEW —


R4 I/O
R5 I/O
R6 I/O
R7 I/O
R8 I/O
R9 I/O
R10 I/O
R11 I/O
R12 I/O
R13 I/O
R14 I/O
K0 IN
K1 IN
K2 IN
K3 IN
EX IN
X IN
RESET IN
IRQ IN
TC IN
GND
VDD (+4.5 to +5.5V)
START IN
R3 I/O
R2 I/O
R1 I/O
R0 I/O
P3 OUT
P2 OUT
P1 OUT
P0 OUT
07 OUT
06 OUT
05 OUT
04 OUT
03 OUT
02 OUT
01 OUT
00 OUT
SO OUT
SI IN
SC/TO I/O

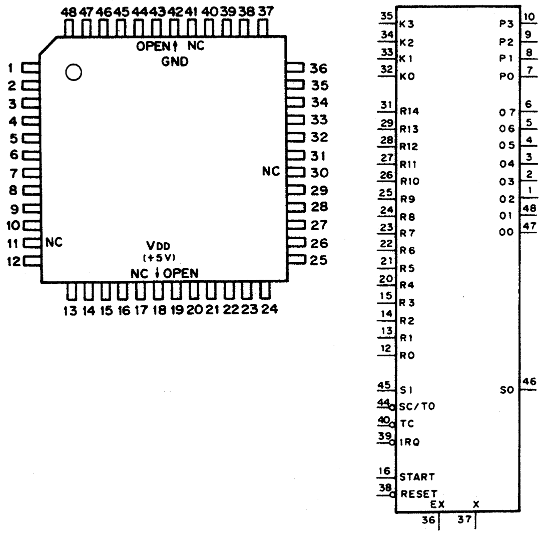

K3
K2
K1
K0
P3
P2
P1
P0
R14
R13
R12
R11
R10
R9
R8
R7
R6
R5
R4
R3
R2
R1
R0
07
06
05
04
03
02
01
00
SI
SC/TO
TC
IRQ
START
RESET
SO
EX
X

EX ; EXTERNAL CLOCK IN
IRQ ; INTERRUPT REQUEST IN
K0-K3 ; 4-BIT PARALLEL IN
00-07 ; 4-BIT PARALLEL OUT
P0-P3 ; 4-BIT PARALLEL OUT
R0-R14 ; DATA IN/OUT
RESET ; RESET IN
SC/TO ; SHIFT CLOCK IN / INT TIMING OUT
SI ; SERIAL DATA IN
SO ; SERIAL DATA OUT
START ; STANDBY OFF IN
TC ; EXTERNAL CLOCK IN FOR COUNTER
X ; CLOCK OUT


START
EX
X
OSC
SC (X1/6)
COMMAND CONTROL
STACK (12×8)
PROGRAM COUNTER
ROM (4096×8)
DECODER
STANDBY CONTROL
PRESCALER SERIAL PORT
PRESCALER TIME COUNTER
PRESCALER TIMER
INTERRUPT CONTROL CIRCUIT
TC
OUTPUT MPX
PSR FOR SERIAL PORT
PSR FOR TIMER COUNTER
PSR FOR TIMER STANDBY CONTROL
TIME INTERRUPT F/F
TIMER /COUNTER INTERRUPT F/F
SERIAL BUFFER FULL/EMPTY F/F
RAM (256×4)
IRQ
SC/TO
SI
SO
SHIFT BIT COUNTER
TIMER BUFFER TBH (4)
TIMER BUFFER TBH (4)
LATCH
SERIAL BUFFER SB (4)
TIMER COUNTER TL (4)
TIMER COUNTER TH (4)
ACCUMULATOR AC (4)
X REGISTER (4)
Y REGISTER (4)
ALU
OUTPUT LATCH
E0 E1 E2 E3 … E23
K0 K1 K2 K3
RESET
Vcc
Vss
R15 R14 R13 R12
R11 R10 R9 R8
R7 R6 R5 R4
R3 R2 R1 R0
O3 O2 O1 O0
P3 P2 P1 P0

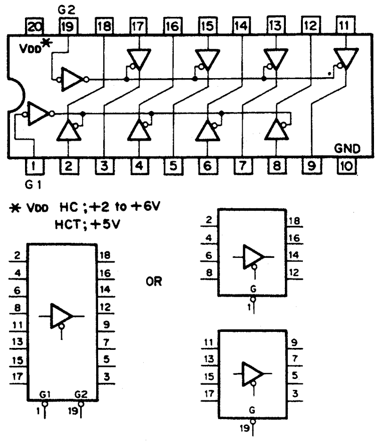
※ PSR : Prescaler Select Register

MB88505PF (FUJITSU) FLAT PACKAGE
C-MOS 4-BIT ONE-CHIP MICROCOMPUTER
— TOP VIEW —

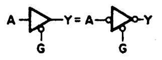

OPEN NC
GND
NC
NC
VDD (+5V)
NC OPEN
K3 K2 K1 K0
R14 R13 R12 R11 R10 R9 R8 R7 R6 R5 R4 R3 R2 R1 R0
P3 P2 P1 P0
O7 O6 O5 O4 O3 O2 O1 O0
SI SC/TO TC IRQ
SO
START
RESET
EX X

EX ; EXTERNAL CLOCK IN
$\overline{\text{IRQ}}$; INTERRUPT REQUEST IN
KO-K3 ; 4-BIT PARALLEL IN
OO-O7 ; 4-BIT PARALLEL OUT
PO-P3 ; 4-BIT PARALLEL OUT
RO-R14 ; DATA IN/OUT
$\overline{\text{RESET}}$; RESET IN
$\overline{\text{SC}}/\overline{\text{TO}}$; SHIFT CLOCK IN/INT TIMING OUT
SI ; SERIAL DATA IN
SO ; SERIAL DATA OUT
START ; STANDBY OFF IN
$\overline{\text{TC}}$; EXTERNAL CLOCK IN FOR COUNTER
X ; CLOCK OUT

MC74HC244N (MOTOROLA)
SN74HC244N (TI)
TC74HC244P (TOSHIBA)
C-MOS BUS BUFFER WITH 3-STATE OUTPUT
— TOP VIEW —


G2
VDD*
GND
G1
OR
G

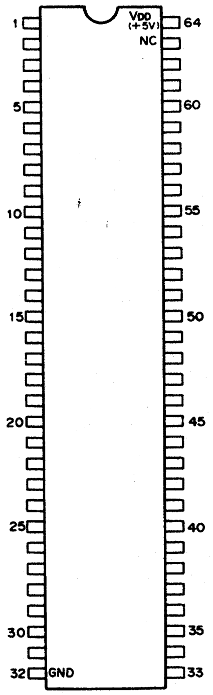
* VDD HC ;+2 to +6V
HCT;+5V



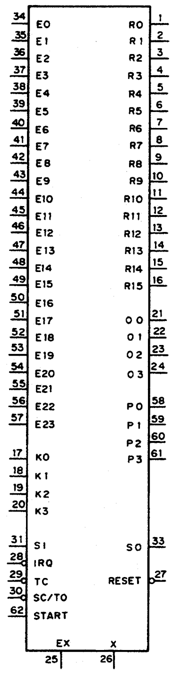
G	A	Y
0	0	0
0	1	1
1	X	HI-Z

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE

MB88525P (FUJITSU)
C-MOS 4-BIT ONE-CHIP MICROCOMPUTER
— TOP VIEW —

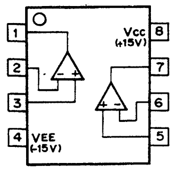

VDD (+5V)
NC
GND

PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL
1	○	○	R0	33		○	SO
2	○	○	R1	34	○	○	E0
3	○	○	R2	35	○	○	E1
4	○	○	R3	36	○	○	E2
5	○	○	R4	37	○	○	E3
6	○	○	R5	38	○	○	E4
7	○	○	R6	39	○	○	E5
8	○	○	R7	40	○	○	E6
9	○	○	R8	41	○	○	E7
10	○	○	R9	42	○	○	E8
11	○	○	R10	43	○	○	E9
12	○	○	R11	44	○	○	E10
13	○	○	R12	45	○	○	E11
14	○	○	R13	46	○	○	E12
15	○	○	R14	47	○	○	E13
16	○	○	R15	48	○	○	E14
17	○		K0	49	○	○	E15
18	○		K1	50	○	○	E16
19	○		K2	51	○	○	E17
20	○		K3	52	○	○	E18
21		○	O0	53	○	○	E19
22		○	O1	54	○	○	E20
23		○	O2	55	○	○	E21
24		○	O3	56	○	○	E22
25	○		EX	57	○	○	E23
26		○	X	58		○	P0
27	○	○	$\overline{\text{RESET}}$	59		○	P1
28	○		$\overline{\text{IRQ}}$	60		○	P2
29	○		$\overline{\text{TC}}$	61		○	P3
30	○	○	$\overline{\text{SC}}/\overline{\text{TO}}$	62	○		START
31	○		SI	63	—	—	———
32			GND	64			VDD

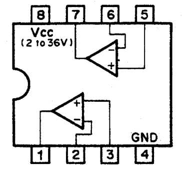

E0 E1 E2 E3 E4 E5 E6 E7 E8 E9 E10 E11 E12 E13 E14 E15 E16 E17 E18 E19 E20 E21 E22 E23
K0 K1 K2 K3
SI IRQ TC SC/TO START
R0 R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14 R15
O0 O1 O2 O3
P0 P1 P2 P3
SO
RESET
EX X

E0-E23 ; I/O PORT (E) IN/OUT
EX ; EXTERNAL CLOCK IN
$\overline{\text{IRQ}}$; EXTERNAL INTERRUPT REQUEST IN
KO-K3 ; INPUT PORT(K) IN
OO-O3 ; OUTPUT PORT(O) OUT
PO-P3 ; OUTPUT PORT(P) OUT
RO-R15 ; I/O PORT (R) IN/OUT
$\overline{\text{RESET}}$; RESET IN
$\overline{\text{SC}}/\overline{\text{TO}}$; SHIFT CLOCK IN/TIMING OUT
SI ; SERIAL DATA IN
START ; STANDBY RELEASE IN
SO ; SERAL DATA OUT
$\overline{\text{TC}}$; EXTERNAL CLOCK IN
X ; CLOCK OUT

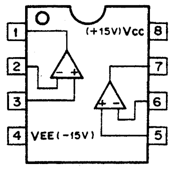
NJM2043D-D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —


Vcc (+15V)
VEE (-15V)

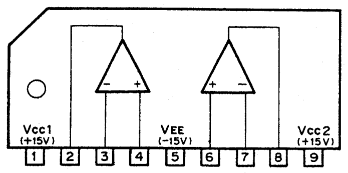
NJM2903D (JRC)
uPC393C (NEC)
VOLTAGE COMPARATOR
— TOP VIEW —


Vcc (2 to 36V)
GND

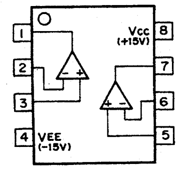
NJM4558D (JRC)
NJM4558D-D (JRC)
uPC4558C (NEC)
OPERATIONAL AMPLIFIER
— TOP VIEW —


(+15V)Vcc
VEE(-15V)

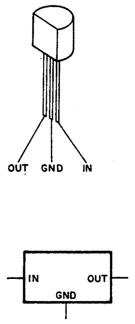
NJM4558S (JRC)
HIGH PERFORMANCE DUAL OPERATIONAL AMPLIFIER
— SIDE VIEW —


Vcc1 (+15V)
VEE (-15V)
Vcc2 (+15V)

NJM4562D-D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —

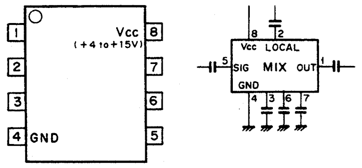

Vcc (+15V)
VEE (-15V)

NJM78L ? ?A (NEC)
uPC78L ? ?J(NEC)
POSITIVE VOLTAGE REGULATOR (100mA)

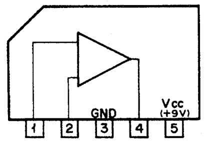

OUT GND IN
IN OUT
GND

+5V NJM78L05A uA78L05ACL uA78L05AWV uPC78L05J AN78L05

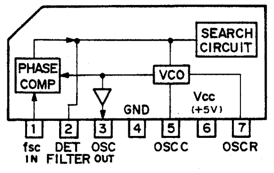
SN16913P (TI)
— TOP VIEW —


Vcc (+4 to +15V)
GND
Vcc LOCAL
SIG MIX OUT
GND

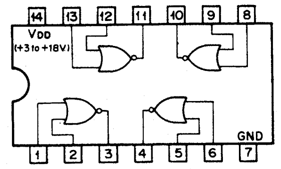
TA7060AP (TOSHIBA)
LINEAR AMP
— SIDE VIEW —

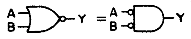


TA7374P (TOSHIBA)
THREE TIMES OSCILLATOR
— SIDE VIEW —


SEARCH CIRCUIT
PHASE COMP
VCO
GND
Vcc (+5V)
fsc IN
DET FILTER
OSC OUT
OSCC
OSCR

TC4001BP (TOSHIBA)
TC4001UBP (TOSHIBA)
C-MOS 2-INPUT NOR GATE
— TOP VIEW —


VDD (+3 to +18V)
GND

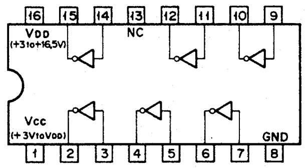


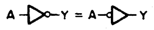
$Y = \overline{A+B} = \overline{A}\cdot\overline{B}$

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

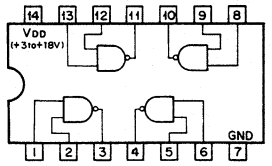
TC4009UBP (TOSHIBA)
C-MOS INVERTING TYPE BUFFER/CONVERTER (TO TTL LEVEL)
— TOP VIEW —

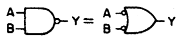

VDD (+3 to +16.5V)
NC
Vcc (+3V to VDD)
GND



A	Y
0	1
1	0

TC4011BP (TOSHIBA)
C-MOS 2-INPUT NAND GATE
— TOP VIEW —


VDD (+3 to +18V)
GND

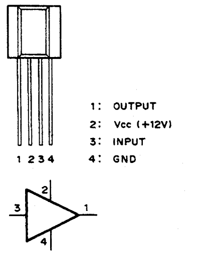


$Y = \overline{A\cdot B} = \overline{A}+\overline{B}$

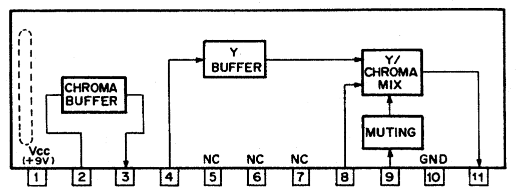
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0:LOW LEVEL
1:HIGH LEVEL

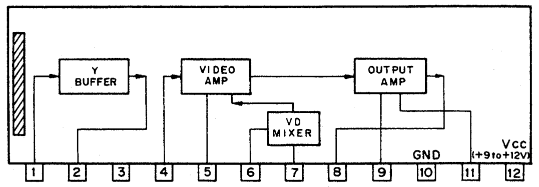
AN608P (MATSUSHITA)
WIDE BAND AMPLIFIER
— PRINTED SIDE VIEW —


1 2 3 4
1: OUTPUT
2: Vcc (+12V)
3: INPUT
4: GND
1
2
3
4

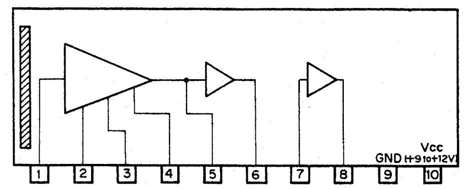
BX373A (SONY)
BX373AL (ROHM)
MIX AMP
— REAR VIEW —


CHROMA BUFFER
Y BUFFER
Y/ CHROMA MIX
MUTING
Vcc (+9V)
NC
NC
NC
GND
1
2
3
4
5
6
7
8
9
10
11

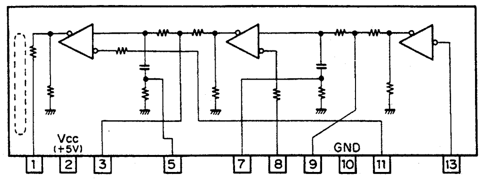
BX388 (SONY)
BX388L (ROHM)
VIDEO AMP/VD MIXER
— PRINTED SIDE —


Y BUFFER
VIDEO AMP
OUTPUT AMP
VD MIXER
GND
Vcc (+9 to +12V)
1
2
3
4
5
6
7
8
9
10
11
12

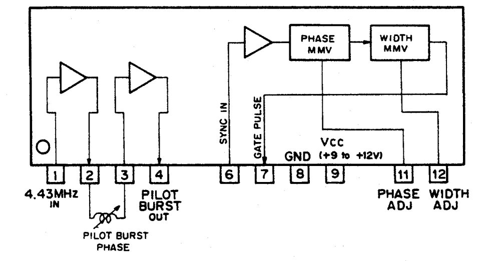
BX389 (SONY)
BX389L (ROHM)
VIDEO AMPLIFIER
— PRINTED SIDE —


GND
Vcc (+9 to 12V)
1
2
3
4
5
6
7
8
9
10

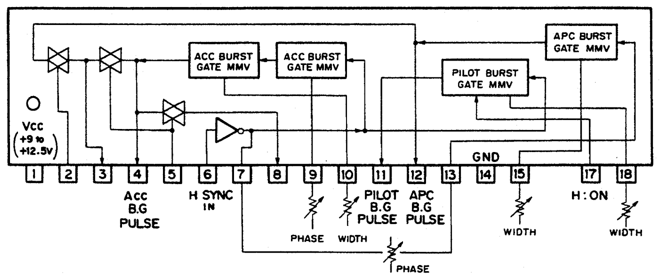
BX1140 (SONY)
BX1140L (ROHM)
HF AMP
— REAR VIEW —


Vcc (+5V)
GND
1
2
3
5
7
8
9
10
11
13

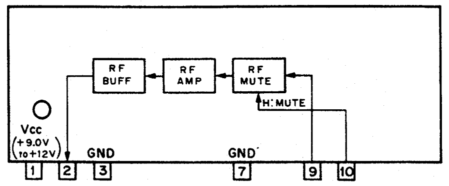
BX1262L (ROHM)
PILOT BURST INSERTER
— PRINTED SIDE VIEW —


PHASE MMV
WIDTH MMV
SYNC IN
GATE PULSE
GND
Vcc (+9 to +12V)
1
2
3
4
6
7
8
9
11
12
4.43MHz IN
PILOT BURST OUT
PILOT BURST PHASE
PHASE ADJ
WIDTH ADJ

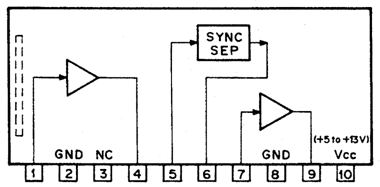
BX1264L (ROHM)
ACC/APC BURST GATE PULSE GENERATOR
— PRINTED SIDE VIEW —


ACC BURST GATE MMV
ACC BURST GATE MMV
APC BURST GATE MMV
PILOT BURST GATE MMV
Vcc (+9 to +12.5V)
GND
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
17
18
Acc B.G PULSE
H SYNC IN
PILOT B.G PULSE
APC B.G PULSE
H : ON
PHASE
WIDTH
PHASE
WIDTH
WIDTH

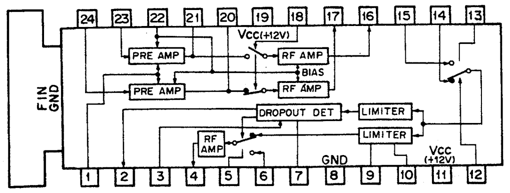
BX1265 (SONY)
BX1265L (ROHM)
VIDEO HEAD AMPLIFIER/MUTING
— PRINTED SIDE VIEW —


RF BUFF
RF AMP
RF MUTE
H: MUTE
Vcc (+9.0V to +12V)
GND
GND
1
2
3
7
9
10

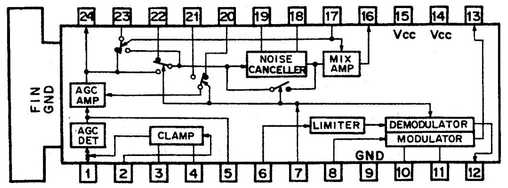
BX3915A (SONY)
SYNC SEPARATOR
— PRINTED SIDE —


SYNC SEP
GND
NC
GND
Vcc (+5 to +13V)
1
2
3
4
5
6
7
8
9
10

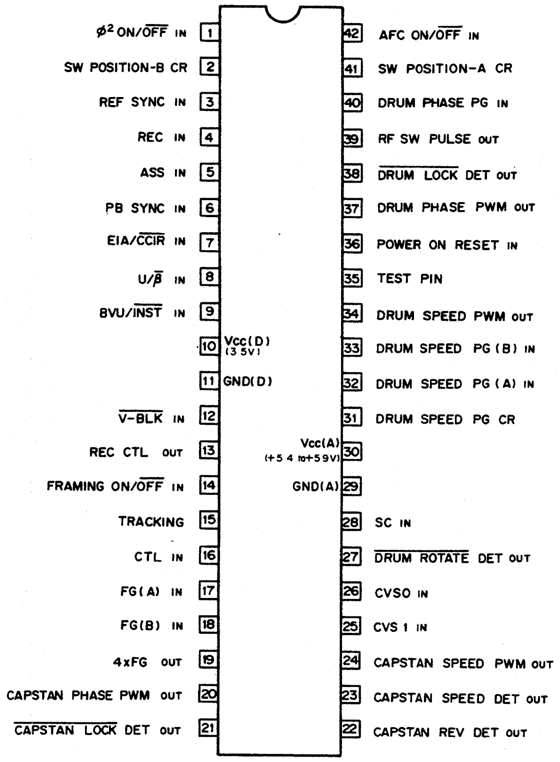
CX134A (SONY)
HEAD AMP/DROPOUT COMPENSATOR
— TOP VIEW —

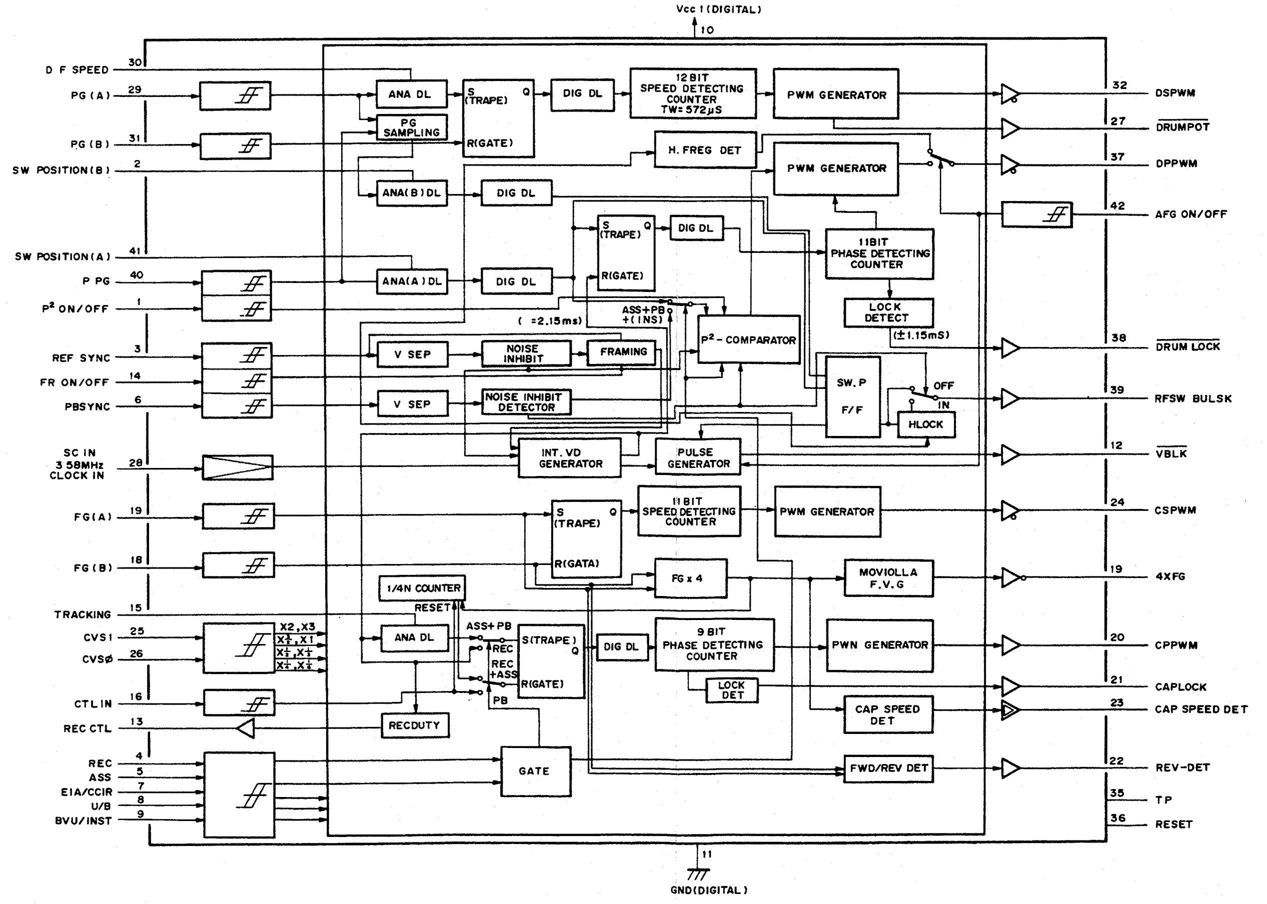

FIN GND
PRE AMP
PRE AMP
Vcc (+12V)
RF AMP
BIAS
RF AMP
DROPOUT DET
LIMITER
LIMITER
RF AMP
GND
Vcc (+12V)
24
23
22
21
20
19
18
17
16
15
14
13
1
2
3
4
5
6
7
8
9
10
11
12

CX187 (SONY)
LUMINANCE SIGNAL PROCESSER
—TOP VIEW—

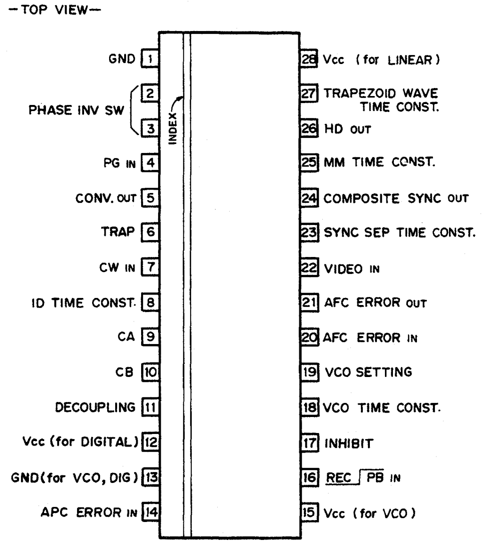

FIN GND
Vcc
Vcc
NOISE CANCELLER
MIX AMP
AGC AMP
AGC DET
CLAMP
LIMITER
DEMODULATOR
MODULATOR
GND
24
23
22
21
20
19
18
17
16
15
14
13
1
2
3
4
5
6
7
8
9
10
11
12

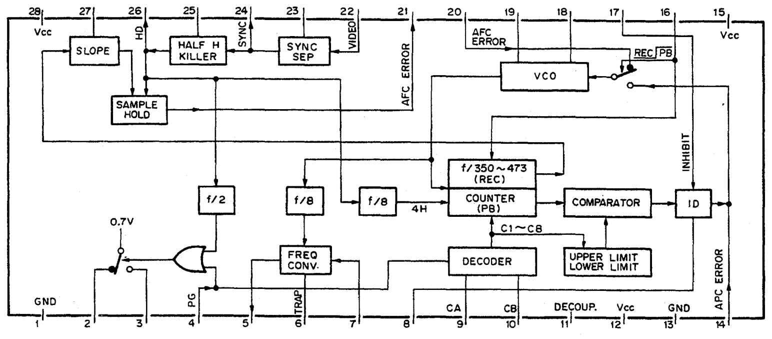
CX194B (SONY)
DRUM/CAPSTAN PWM SERVO
— TOP VIEW —


ϕ^2 ON/OFF IN 1
SW POSITION-B CR 2
REF SYNC IN 3
REC IN 4
ASS IN 5
PB SYNC IN 6
EIA/CCIR IN 7
U/β IN 8
BVU/INST IN 9
10 Vcc(D) (3.5V)
11 GND(D)
V-BLK IN 12
REC CTL OUT 13
FRAMING ON/OFF IN 14
TRACKING 15
CTL IN 16
FG(A) IN 17
FG(B) IN 18
4xFG OUT 19
CAPSTAN PHASE PWM OUT 20
CAPSTAN LOCK DET OUT 21
42 AFC ON/OFF IN
41 SW POSITION-A CR
40 DRUM PHASE PG IN
39 RF SW PULSE OUT
38 DRUM LOCK DET OUT
37 DRUM PHASE PWM OUT
36 POWER ON RESET IN
35 TEST PIN
34 DRUM SPEED PWM OUT
33 DRUM SPEED PG (B) IN
32 DRUM SPEED PG (A) IN
31 DRUM SPEED PG CR
Vcc(A) (+5.4 to +5.9V) 30
GND(A) 29
28 SC IN
27 DRUM ROTATE DET OUT
26 CVSO IN
25 CVS 1 IN
24 CAPSTAN SPEED PWM OUT
23 CAPSTAN SPEED DET OUT
22 CAPSTAN REV DET OUT


Vcc 1 (DIGITAL)
10
D F SPEED 30
PG (A) 29
PG (B) 31
SW POSITION (B) 2
SW POSITION (A) 41
P PG 40
P² ON/OFF 1
REF SYNC 3
FR ON/OFF 14
PBSYNC 6
SC IN 3.58MHz CLOCK IN 28
FG (A) 19
FG (B) 18
TRACKING 15
CVS1 25
CVSØ 26
CTL IN 16
REC CTL 13
REC 4
ASS 5
EIA/CCIR 7
U/B 8
BVU/INST 9
ANA DL
PG SAMPLING
S (TRAPE) Q
R(GATE)
DIG DL
12 BIT SPEED DETECTING COUNTER TW=572µS
PWM GENERATOR
H. FREG DET
PWM GENERATOR
ANA(B) DL
DIG DL
S (TRAPE) Q
R(GATE)
DIG DL
11BIT PHASE DETECTING COUNTER
ANA(A) DL
DIG DL
ASS+PB +(INS)
(≈2.15ms)
P² - COMPARATOR
LOCK DETECT
(±1.15mS)
V SEP
NOISE INHIBIT
FRAMING
V SEP
NOISE INHIBIT DETECTOR
SW. P F/F
OFF
IN
HLOCK
INT. VD GENERATOR
PULSE GENERATOR
S (TRAPE) Q
R(GATA)
11 BIT SPEED DETECTING COUNTER
PWM GENERATOR
FG x 4
MOVIOLLA F.V.G
1/4N COUNTER
RESET
X2, X3
X½, X1
X⅓, X⅓
X¼, X¼
ANA DL
ASS+PB
REC
REC +ASS
PB
S(TRAPE) Q
R(GATE)
DIG DL
9 BIT PHASE DETECTING COUNTER
PWN GENERATOR
LOCK DET
CAP SPEED DET
RECDUTY
GATE
FWD/REV DET
32 DSPWM
27 DRUMPOT
37 DPPWM
42 AFG ON/OFF
38 DRUM LOCK
39 RFSW BULSK
12 VBLK
24 CSPWM
19 4XFG
20 CPPWM
21 CAPLOCK
23 CAP SPEED DET
22 REV-DET
35 TP
36 RESET
11
GND (DIGITAL)

CX859 (SONY)
—TOP VIEW—


GND 1
PHASE INV SW 2
3
PG IN 4
CONV. OUT 5
TRAP 6
CW IN 7
ID TIME CONST. 8
CA 9
CB 10
DECOUPLING 11
Vcc (for DIGITAL) 12
GND (for VCO, DIG) 13
APC ERROR IN 14
INDEX
28 Vcc (for LINEAR)
27 TRAPEZOID WAVE TIME CONST.
26 HD OUT
25 MM TIME CONST.
24 COMPOSITE SYNC OUT
23 SYNC SEP TIME CONST.
22 VIDEO IN
21 AFC ERROR OUT
20 AFC ERROR IN
19 VCO SETTING
18 VCO TIME CONST.
17 INHIBIT
16 REC / PB IN
15 Vcc (for VCO)


Vcc
SLOPE
HD
HALF H KILLER
SYNC
SYNC SEP
VIDEO
AFC ERROR
AFC ERROR
VCO
REC PB
SAMPLE HOLD
INHIBIT
f/350~473 (REC)
COUNTER (PB)
COMPARATOR
ID
f/2
f/8
f/8
4H
0.7V
C1~C8
FREQ CONV.
DECODER
UPPER LIMIT LOWER LIMIT
APC ERROR
GND
PG
TRAP
CA
CB
DECOUP.
Vcc
GND
Vcc

DECODER TRUTH TABLE

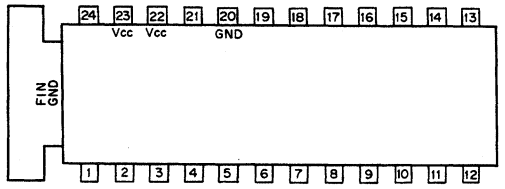
CB / CA	LOW	OPEN	HIGH
LOW	C1	C7	—
OPEN	C4	C5	C6
HIGH	—	*C2 C3	C8

* PG : L--- C2
PG : H--- C3

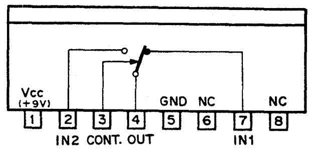
AFC/APC PRESET DATA

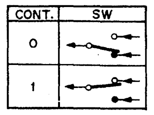
	AFC COUNT DOWN	APC ID COUNT	
		UPPER LIM.	LOWER LIM.
C1	f/473	105	95
C2	f/351	129	119
C3	f/353	137	127
C4	f/351	118	104
C5	f/351	131	117
C6	f/351	144	130
C7	f/350	136	104
C8	——	125	115

CX872 (SONY)
— TOP VIEW —

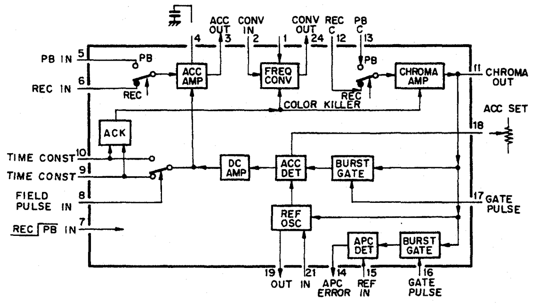

24 23 22 21 20 19 18 17 16 15 14 13
Vcc Vcc GND
FIN GND
1 2 3 4 5 6 7 8 9 10 11 12

CX20061 (SONY)
ANALOG SWITCH
— SIDE VIEW —

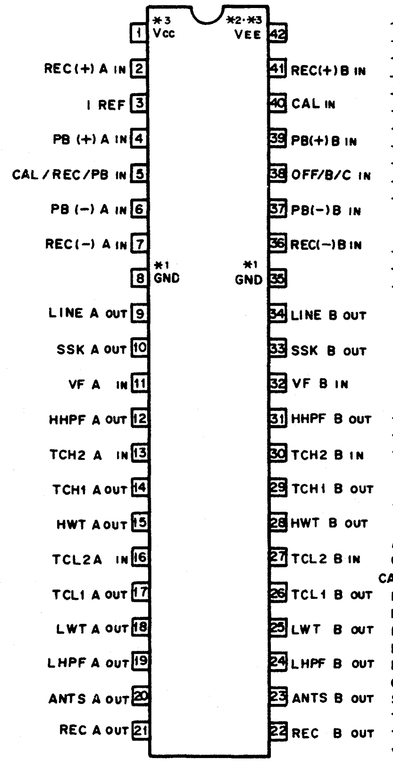

Vcc (+9V)
GND NC
NC
1 2 3 4 5 6 7 8
IN2 CONT. OUT
IN1

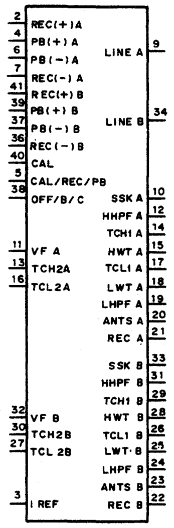


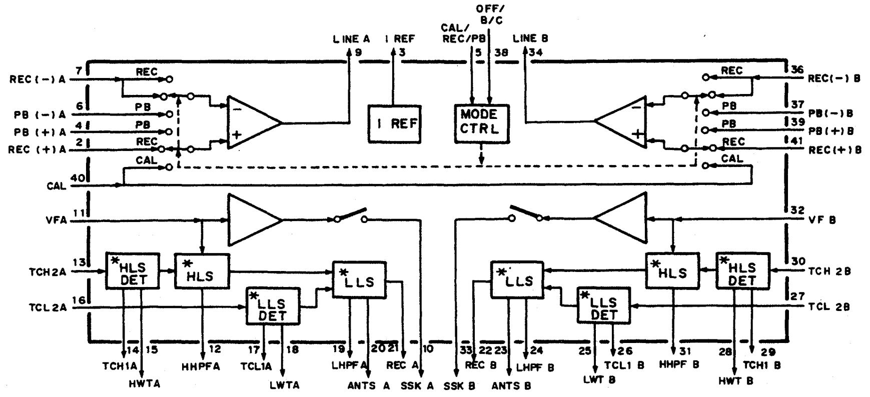
0 ; LOW LEVEL
1 ; HIGH LEVEL


ACC OUT
CONV IN
CONV OUT
REC C
PB C
PB IN
REC IN
PB
REC
ACC AMP
FREQ CONV
CHROMA AMP
CHROMA OUT
COLOR KILLER
ACC SET
ACK
TIME CONST
TIME CONST
DC AMP
ACC DET
BURST GATE
FIELD PULSE IN
REC / PB IN
REF OSC
GATE PULSE
APC DET
BURST GATE
OUT IN
APC ERROR
REF IN
GATE PULSE

CX20188 (SONY)
DOLBY B TYPE AND C TYPE, NOISE REDUCTION SYSTEM
— TOP VIEW —


*3 Vcc 1
REC(+) A IN 2
I REF 3
PB (+) A IN 4
CAL/REC/PB IN 5
PB (−) A IN 6
REC(−) A IN 7
*1 GND 8
LINE A OUT 9
SSK A OUT 10
VF A IN 11
HHPF A OUT 12
TCH2 A IN 13
TCH1 A OUT 14
HWT A OUT 15
TCL2A IN 16
TCL1 A OUT 17
LWT A OUT 18
LHPF A OUT 19
ANTS A OUT 20
REC A OUT 21
*2·*3 VEE 42
41 REC(+) B IN
40 CAL IN
39 PB(+) B IN
38 OFF/B/C IN
37 PB(−) B IN
36 REC(−) B IN
*1 GND 35
34 LINE B OUT
33 SSK B OUT
32 VF B IN
31 HHPF B OUT
30 TCH2 B IN
29 TCH1 B OUT
28 HWT B OUT
27 TCL2 B IN
26 TCL1 B OUT
25 LWT B OUT
24 LHPF B OUT
23 ANTS B OUT
22 REC B OUT

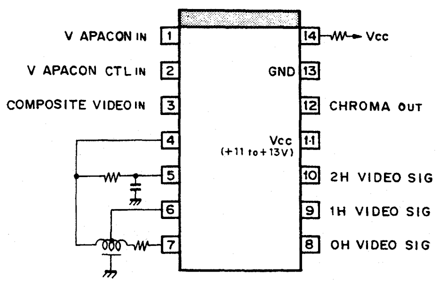

2 REC(+) A
4 PB(+) A
6 PB(−) A
7 REC(−) A
41 REC(+) B
39 PB(+) B
37 PB(−) B
36 REC(−) B
40 CAL
5 CAL/REC/PB
38 OFF/B/C
LINE A 9
LINE B 34
SSK A 10
HHPF A 12
TCH1 A 14
HWT A 15
TCL1 A 17
LWT A 18
LHPF A 19
ANTS A 20
REC A 21
11 VF A
13 TCH2A
16 TCL2A
SSK B 33
HHPF B 31
TCH1 B 29
32 VF B
30 TCH2B
27 TCL 2B
HWT B 28
TCL1 B 26
LWT B 25
LHPF B 24
ANTS B 23
3 I REF
REC B 22

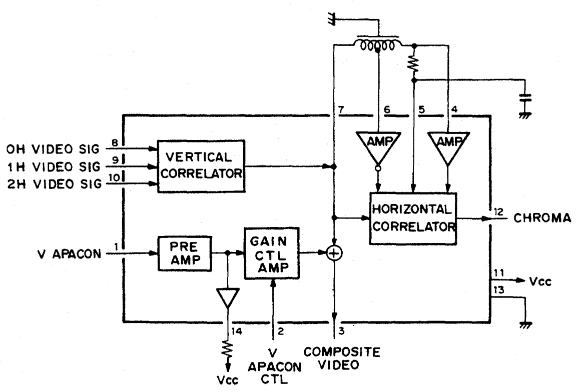

OFF/ B/C
CAL/ REC/PB
LINE A
I REF
LINE B
REC(−) A
PB (−) A
PB (+) A
REC (+) A
REC
PB
PB
REC
CAL
I REF
MODE CTRL
REC
PB
PB
REC
CAL
REC(−) B
PB(−) B
PB(+) B
REC(+) B
CAL
VFA
VF B
TCH2A
TCL2A
*HLS DET
*HLS
*LLS
*LLS DET
*LLS
*LLS DET
*HLS
*HLS DET
TCH 2B
TCL 2B
TCH1A HWTA
HHPFA
TCL1A
LWTA
LHPFA
REC A
ANTS A
SSK A
SSK B
ANTS B
REC B
LHPF B
LWT B
TCL1 B
HHPF B
HWT B
TCH1 B

ANTS	; ANTI SATURATION
CAL	; CALIBRATION
CAL/REC/PB	; CALIBRATION/REC/ PB SELECT
HHPF	; *HLS HIGH PASS FILTER
HWT	; *HLS WAITING
I REF	; REFERENCE SOURCE CURRENT
LHPF	; *LLS HIGH PASS FILTER
LWT	; *LLS WAITING
OFF/B/C	; DOLBY NR OFF/B-TYPE/C-TYPE SELECT
SSK	; SPECTRAL SKEWING SWITCH
TCH	; *HLS DETECTOR TIME CONSTANT
TCL	; *LLS DETECTOR TIME CONSTANT
VF	; ENCODE INPUT
*HLS	; HIGH LEVEL STAGE
*LLS	; LOW LEVEL STAGE

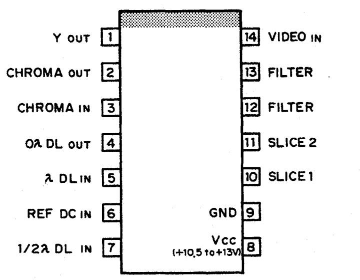
*1 ; ONE POWER→Vcc/2. TWO POWER→GND
*2 ; ONE POWER→GND. TWO POWER→VEE
*3 ; Vcc − VEE : +8 to +21V

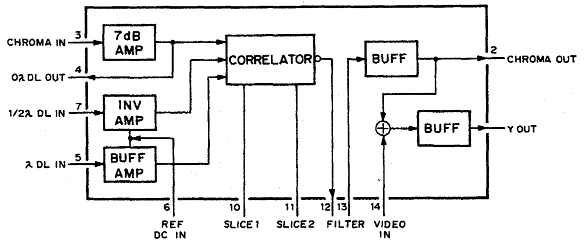
CX22013 (SONY)
DYNAMIC COMB FILTER
— TOP VIEW —


V APACON IN 1
V APACON CTL IN 2
COMPOSITE VIDEO IN 3
4
5
6
7
14 Vcc
GND 13
12 CHROMA OUT
Vcc (+11 to +13V) 11
10 2H VIDEO SIG IN
9 1H VIDEO SIG IN
8 0H VIDEO SIG IN


0H VIDEO SIG
1H VIDEO SIG
2H VIDEO SIG
VERTICAL CORRELATOR
AMP
AMP
HORIZONTAL CORRELATOR
CHROMA
V APACON
PRE AMP
GAIN CTL AMP
Vcc
V APACON CTL
COMPOSITE VIDEO
Vcc

CXA1020P (SONY)
CHROMA CROSS-COLOR NOISE REDUCER/EDGE COMPENSATOR
— TOP VIEW —

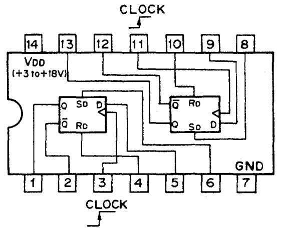

Y OUT 1
CHROMA OUT 2
CHROMA IN 3
0λ DL OUT 4
λ DL IN 5
REF DC IN 6
1/2λ DL IN 7
14 VIDEO IN
13 FILTER
12 FILTER
11 SLICE 2
10 SLICE 1
GND 9
Vcc (+10.5 to +13V) 8


CHROMA IN
7dB AMP
0λ DL OUT
CORRELATOR
BUFF
CHROMA OUT
1/2λ DL IN
INV AMP
λ DL IN
BUFF AMP
BUFF
Y OUT
REF DC IN
SLICE1
SLICE2
FILTER
VIDEO IN

TC4013BP (TOSHIBA)

C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET

— TOP VIEW —


CLOCK
14
13
12
11
10
9
8
VDD
(+3 to+18V)
Q
SD
D
Q̄
RD
RO
SD
GND
1
2
3
4
5
6
7
CLOCK

DIRECT R-S FLIP FLOP

SD	RD	Q	Q̄
0	0	Qn	Q̄n
0	1	0	1
1	0	1	0
1	1	0	1

D-TYPE FLIP FLOP

CKn	CKn+1
D	Q
0	0
1	1

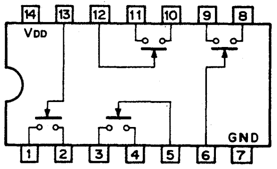
CLOCK CK; _⌐
CKn; BEFORE CLOCK
CKn+1; AFTER CLOCK

0; LOW LEVEL
1; HIGH LEVEL

TC4016BPHB (TOSHIBA)

C-MOS BILATERAL SWITCH

— TOP VIEW —


14
13
12
11
10
9
8
VDD
GND
1
2
3
4
5
6
7

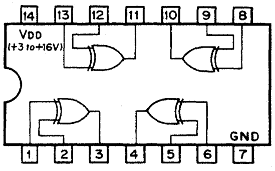
CONT IN	SW
0	OFF
1	ON

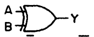
0; LOW LEVEL
1; HIGH LEVEL

TC4030BP (TOSHIBA)
TC4030BPHB (TOSHIBA)

C-MOS EXCLUSIVE OR GATE

— TOP VIEW —


14
13
12
11
10
9
8
VDD
(+3 to+16V)
GND
1
2
3
4
5
6
7



$Y = \bar{A} \cdot B + A \cdot \bar{B}$

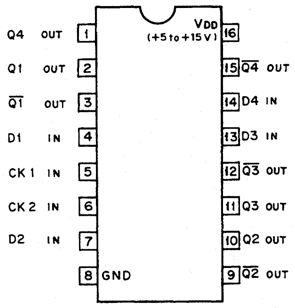
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

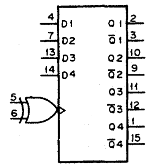
0; LOW LEVEL
1; HIGH LEVEL

TC4042BP (TOSHIBA)

C-MOS D-TYPE LATCH

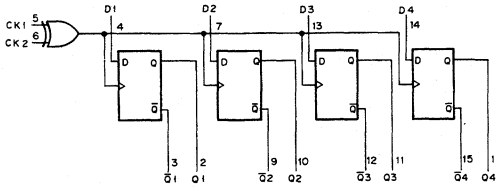
— TOP VIEW —


VDD
(+5 to +15 V)
Q4 OUT 1
Q1 OUT 2
Q̄1 OUT 3
D1 IN 4
CK1 IN 5
CK2 IN 6
D2 IN 7
8 GND
16
15 Q̄4 OUT
14 D4 IN
13 D3 IN
12 Q̄3 OUT
11 Q3 OUT
10 Q2 OUT
9 Q̄2 OUT


4 D1
7 D2
13 D3
14 D4
5
6
Q1 2
Q̄1 3
Q2 10
Q̄2 9
Q3 11
Q̄3 12
Q4 1
Q̄4 15

FUNCTION TABLE

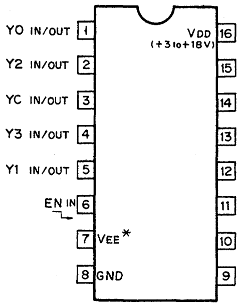
CK1	CK2	Q / Q̄
0	0	PASS DATA
0	1	LATCH DATA
1	0	LATCH DATA
1	1	PASS DATA

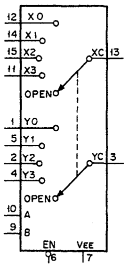

CK1 5
CK2 6
D1 4
D2 7
D3 13
D4 14
D
Q
Q̄
3 Q̄1
2 Q1
9 Q̄2
10 Q2
12 Q̄3
11 Q3
15 Q̄4
1 Q4

TC4052BP (TOSHIBA)
TC4052BPHB (TOSHIBA)

C-MOS 4-CHANNEL MULTIPLEXER/DEMULTIPLEXER

— TOP VIEW —


Y0 IN/OUT 1
Y2 IN/OUT 2
YC IN/OUT 3
Y3 IN/OUT 4
Y1 IN/OUT 5
EN IN 6
7 VEE*
8 GND
VDD (+3 to+18V) 16
15 X2 IN/OUT
14 X1 IN/OUT
13 XC IN/OUT
12 X0 IN/OUT
11 X3 IN/OUT
10 A IN
9 B IN


12 X0
14 X1
15 X2
11 X3
XC 13
OPEN
1 Y0
5 Y1
2 Y2
4 Y3
YC 3
OPEN
10 A
9 B
EN 6
VEE 7

VEE*; VDD−VEE = +3 to +18V

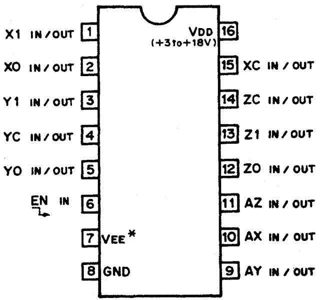
CONTROL INPUTS			"ON" CHANNEL
EN	B	A	
0	0	0	0
0	0	1	1
0	1	0	2
0	1	1	3
1	X	X	OPEN

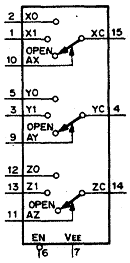
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.

TC4053BP (TOSHIBA)
TC4053BPHB (TOSHIBA)
uPD4053BC (NEC)

C-MOS 2-CHANNEL MULTIPLEXER/DEMULTIPLEXER

— TOP VIEW —


X1 IN/OUT 1
X0 IN/OUT 2
Y1 IN/OUT 3
YC IN/OUT 4
Y0 IN/OUT 5
EN IN 6
7 VEE*
8 GND
VDD (+3 to+18V) 16
15 XC IN/OUT
14 ZC IN/OUT
13 Z1 IN/OUT
12 Z0 IN/OUT
11 AZ IN/OUT
10 AX IN/OUT
9 AY IN/OUT


2 X0
1 X1
OPEN
10 AX
XC 15
5 Y0
3 Y1
OPEN
9 AY
YC 4
12 Z0
13 Z1
OPEN
11 AZ
ZC 14
EN 6
VEE 7

VEE*; VDD−VEE = +3 to+18V

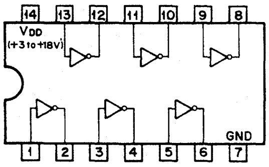
CONT. INPUTS		ON CHANNEL
EN	A (X,Y,Z)	
0	0	0
0	1	1
1	X	OPEN

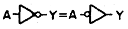
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.

TC4069UBF (TOSHIBA) FLAT PACKAGE
TC4069UBP (TOSHIBA)

C-MOS INVERTER

— TOP VIEW —


14
13
12
11
10
9
8
VDD
(+3 to+18V)
GND
1
2
3
4
5
6
7



Y=Ā

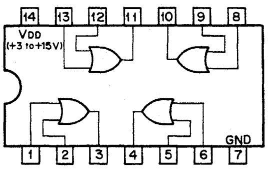
A	Y
0	1
1	0

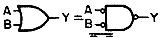
0; LOW LEVEL
1; HIGH LEVEL

TC4071BP (TOSHIBA)

C-MOS 2-INPUT OR GATE

— TOP VIEW —


14
13
12
11
10
9
8
VDD
(+3 to+15V)
GND
1
2
3
4
5
6
7

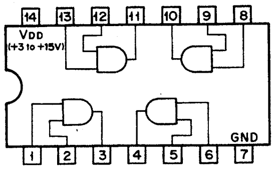


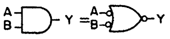
$Y = A + B = \overline{\bar{A} \cdot \bar{B}}$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

TC4081BP (TOSHIBA)
C-MOS 2-INPUT AND GATE
— TOP VIEW —


14 13 12 11 10 9 8
VDD
(+3 to +15V)
GND
1 2 3 4 5 6 7

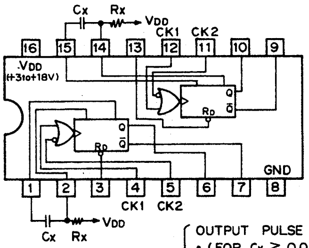


$Y = A \cdot B = \overline{\overline{A} + \overline{B}}$

A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0;LOW LEVEL
1;HIGH LEVEL

TC4528BFHB (TOSHIBA) FLAT PACKAGE
C-MOS RETRIGGERABLE/RESETTABLE MMV
— TOP VIEW —

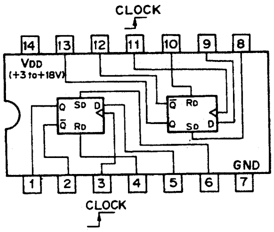

Cx Rx
VDD
CK1 CK2
16 15 14 13 12 11 10 9
VDD
(+3to+18V)
Q
Q̄
RD
Q
Q̄
RD
GND
1 2 3 4 5 6 7 8
CK1 CK2
VDD
Cx Rx

INPUTS			OUTPUTS	
CK1	CK2	RD	Q	Q̄
↑	1	1	⊓	⊔
↑	0	1	Q	Q̄
1	↓	1	Q	Q̄
0	↓	1	⊓	⊔
X	X	0	0	1

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

OUTPUT PULSE WIDTH Q OR $\overline{Q}$
- (FOR $C_x \geqq 0.01\mu F$ USE FORMULA)
  $PW = 0.2 \cdot R_x \cdot C_x \cdot \ell n\,(V_{DD} - GND)$
- (FOR $C_x < 0.01\mu F$ USE DATA BOOK.)

TC504013BP (TOSHIBA)
C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
— TOP VIEW —


CLOCK
14 13 12 11 10 9 8
VDD
(+3 to+18V)
Q SD D
Q̄ RD
Q̄ RD
Q SD D
GND
1 2 3 4 5 6 7
CLOCK

DIRECT R-S FLIP FLOP

SD	RD	Q	Q̄
0	0	Qn	$\overline{Qn}$
0	1	0	1
1	0	1	0
1	1	0	1

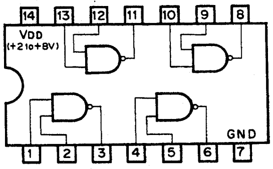
D-TYPE FLIP FLOP

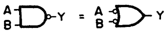
CKn	CKn+1
D	Q
0	0
1	1

CLOCK CK; ↑
CKn; BEFORE CLOCK
CKn+1; AFTER CLOCK

0; LOW LEVEL
1; HIGH LEVEL

TC40H000P (TOSHIBA)
C-MOS 2-INPUT NAND GATE
— TOP VIEW —


14 13 12 11 10 9 8
VDD
(+2 to+8V)
GND
1 2 3 4 5 6 7

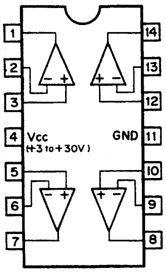


$Y = \overline{A \cdot B} = \overline{A} + \overline{B}$

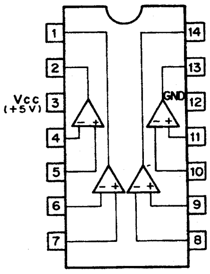
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

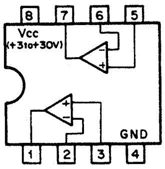
uPC324C (NEC)
QUAD. OP AMPLIFIER
— TOP VIEW —


1 2 3 4 5 6 7
14 13 12 11 10 9 8
Vcc
(+3 to+30V)
GND

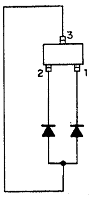
uPC339C (NEC)
COMPARATOR
— TOP VIEW —


1 2 3 4 5 6 7
14 13 12 11 10 9 8
Vcc
(+5V)
GND

uPC358C (NEC)
DUAL OPERATIONAL AMPLIFIERS
— TOP VIEW —

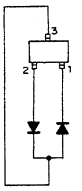

8 7 6 5
Vcc
(+3to+30V)
GND
1 2 3 4

TOP VIEW (SCALE 4/1)

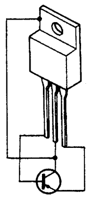


1S2835
1S2835-T1

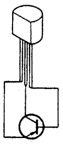
TOP VIEW (SCALE 4/1)



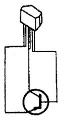
1SS123



2SA768
2SA771

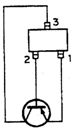


2SA844
2SA933

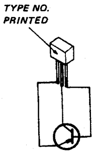


2SA1048
2SA1115

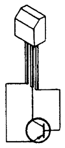
TOP VIEW (SCALE 4/1)



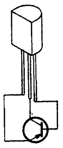
2SA1162
2SA1226


TYPE NO.
PRINTED

2SA1175
2SA1175F

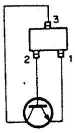


2SB733

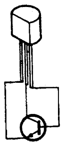


2SB739

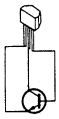
TOP VIEW (SCALE 4/1)



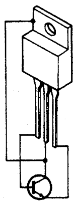
2SC1623
2SC2757



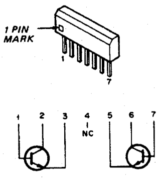
2SC1740
2SC2878



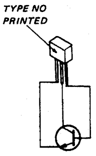
2SC1740S
2SC2458
2SC2603
2SC2603G
2SC403SP



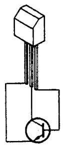
2SC1826


1 PIN
MARK
1
7
1
2
3
4
NC
5
6
7

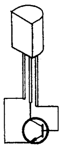
2SC2771


TYPE NO
PRINTED

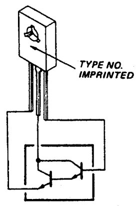
2SC2785E
2SC2785F
2SC2785K



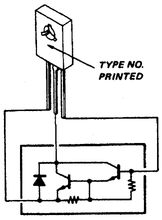
2SD773
2SD774



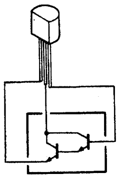
2SD788


TYPE NO.
IMPRINTED

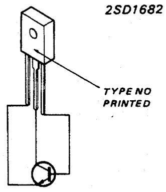
2SD894


TYPE NO.
PRINTED

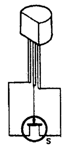
2SD998



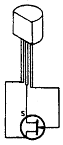
2SD1111


TYPE NO
PRINTED

2SD1682

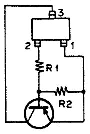


2SK105A

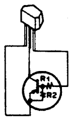


2SK523

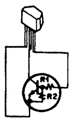
TOP VIEW (SCALE 4/1)



DTA124EK (R1=22K, R2=22K)
DTA144EK (R1=47K, R2=47K)

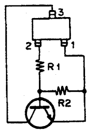


DTA124XS (R1=22K, R2=47K)
DTA144ES (R1=47K, R2=47K)



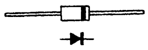
DTC124ES (R1=22K, R2=22K)
DTC124XS (R1=22K, R2=47K)
DTC144ES (R1=47K, R2=47K)

TOP VIEW (SCALE 4/1)

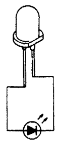


DTC144EK (R1=47K, R2=47K)

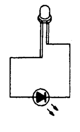
DIODE



10E-2
1S1555
1S1555S
1SS119
1SS133
1SS148
ERB12-? ?
SIB01-02

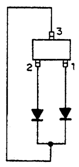


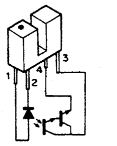
GL-5HD5 ; RED



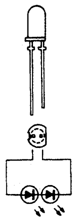
TLY123 ; YELLOW
TLUY 154 . YELLOW
TLUG 154 . GREEN

TOP VIEW (SCALE 4/1)   1S2837

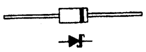




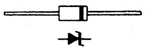
GP-1L52
GP-1L53



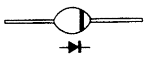
TLY255 ; YELLOW



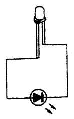
1SS97
1SS97-1
1SS99



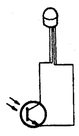
RD ? ?EB ?
RD ? ?ESB ?



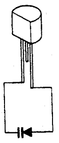
U05E



BR5104S ; RED



SPS102



FC54M

SECTION 14
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

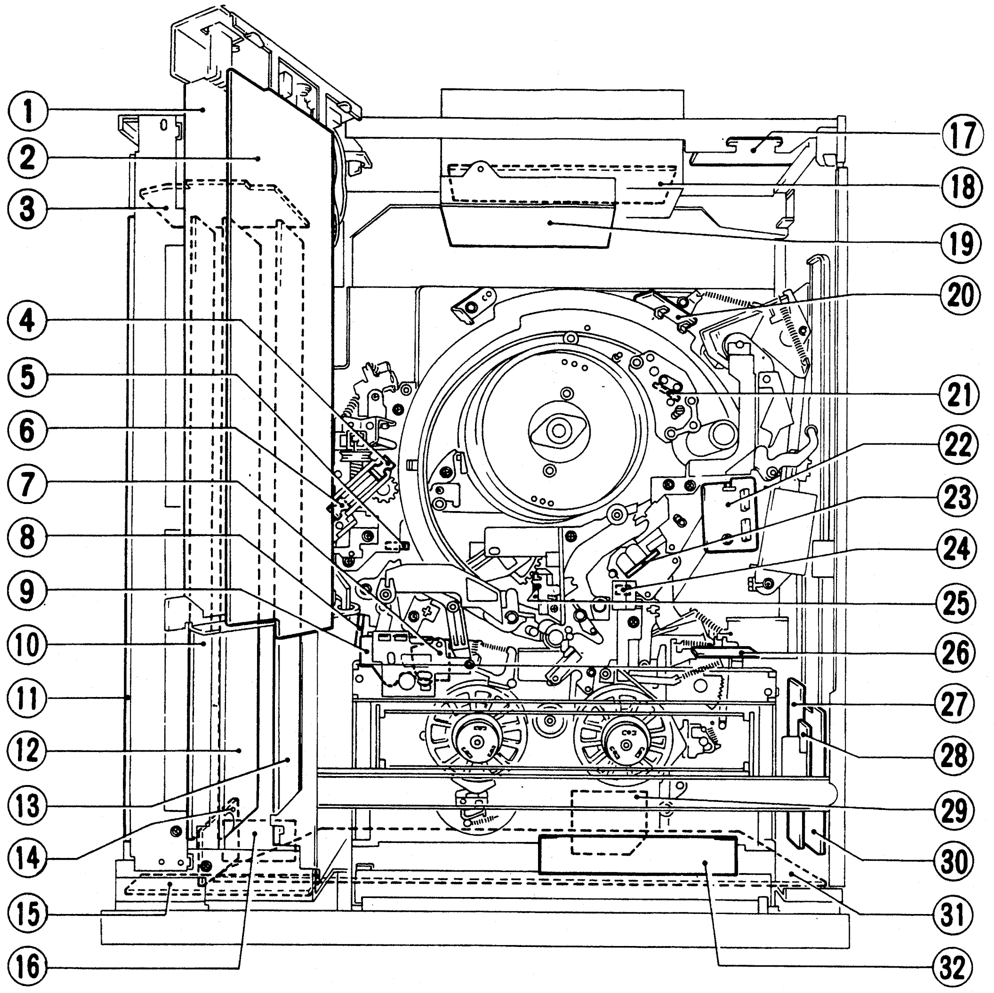
CIRCUIT FUNCTION OF THE PRINTED CIRCUIT BOARD

Circuit information is provided below.

SYSTEM	BOARD	CIRCUIT FUNCTION
VIDEO	RP-35	PB Amplifier
	VO-17	Y REC/PB (Y/C Separator)
	CO-7	Color REC/PB
AUDIO	AU-82	PB Amplifier
	AU-89	Dolby
	CP-112	Output Amplifier
	DUS-92	Audio CTL Head
	DUS-147	Audio CTL Head
	HP-30	Headphones
	MC-28	MIC In
	MT-29	Audio Level Meter
SERVO	EC-28	CTL Head
	DUS-92	Audio CTL Head
	DUS-147	Audio CTL Head
	PT-9	Reel Motor Driver
	SV-93C	Servo System
POWER	AC-89	AC Input
	DC-31A	DC Supply
	UR-14E	Switching Regulator
KEY	KY-105C	Function Key/Display
SYSTEM CONTROL	IF-132	33P Interface
	PD-40	Plunger Solenoids
	PD-41	Plunger Solenoids
	PH-5	Tape Beginning/End Sensor
	SY-106	System Control
OTHERS	CC-31	Cassette Compartment Driver
	CC-32	Cassette In Detector
	CC-33	Cassette Down Detector
	LM-13	Threading Motor
	LP-41	Cassette Compartment Light
	PTC-30	SP, Miss REC. KCA Detector
	PTC-33	FR Stop Detector
	PTC-34	Unthreadend Detector
	PTC-35	S/T Reel Rotation Detector
	RM-39	Reel Motor
	SE-46	Tension Regulator Detector
	TG-22	Tension Regulator LED

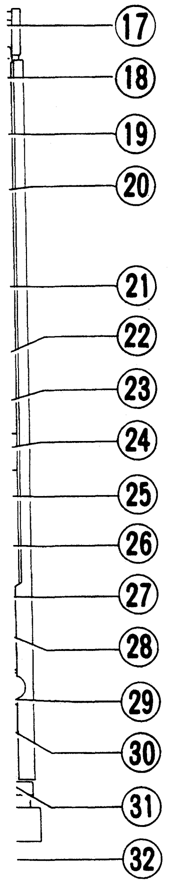
LOCATION OF THE PRINTED CIRCUIT BOARD

〈TOP VIEW〉



1 VO-17 Board
2 CO-7 Board
3 CP-112 Board
4 PH-5 Board
5 LM-13 Board
6 PH-5 Board
7 SE-46 Board
8 PTC-34 Board
9 PTC-30 Board
10 AU-89 Board
11 AU-82 Board
12 SV-93C Board
13 SY-106 Board
14 HP-30 Board
15 MT-29 Board
16 MC-28 Board

17 AC-89 Board
18 UR-14E Board
19 DC-31A Board
20 PTC-33 Board
21 DUS-92 Board
22 DUS-147 Board
23 EC-28 Board
24 PH-5 Board
25 PH-5 Board
26 CC-33 Board
27 CC-32 Board
28 CC-31 Board
29 RM-39 Board
30 PD-40 Board
31 KY-105C Board
32 LP-41 Board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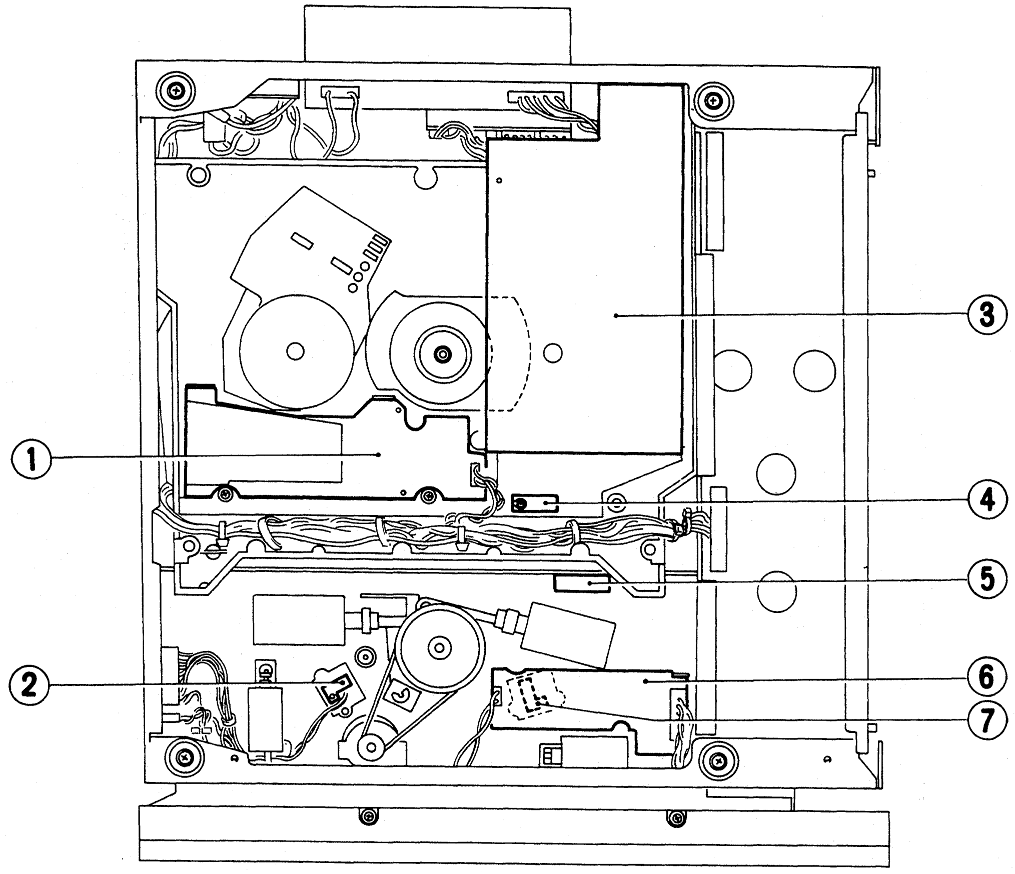
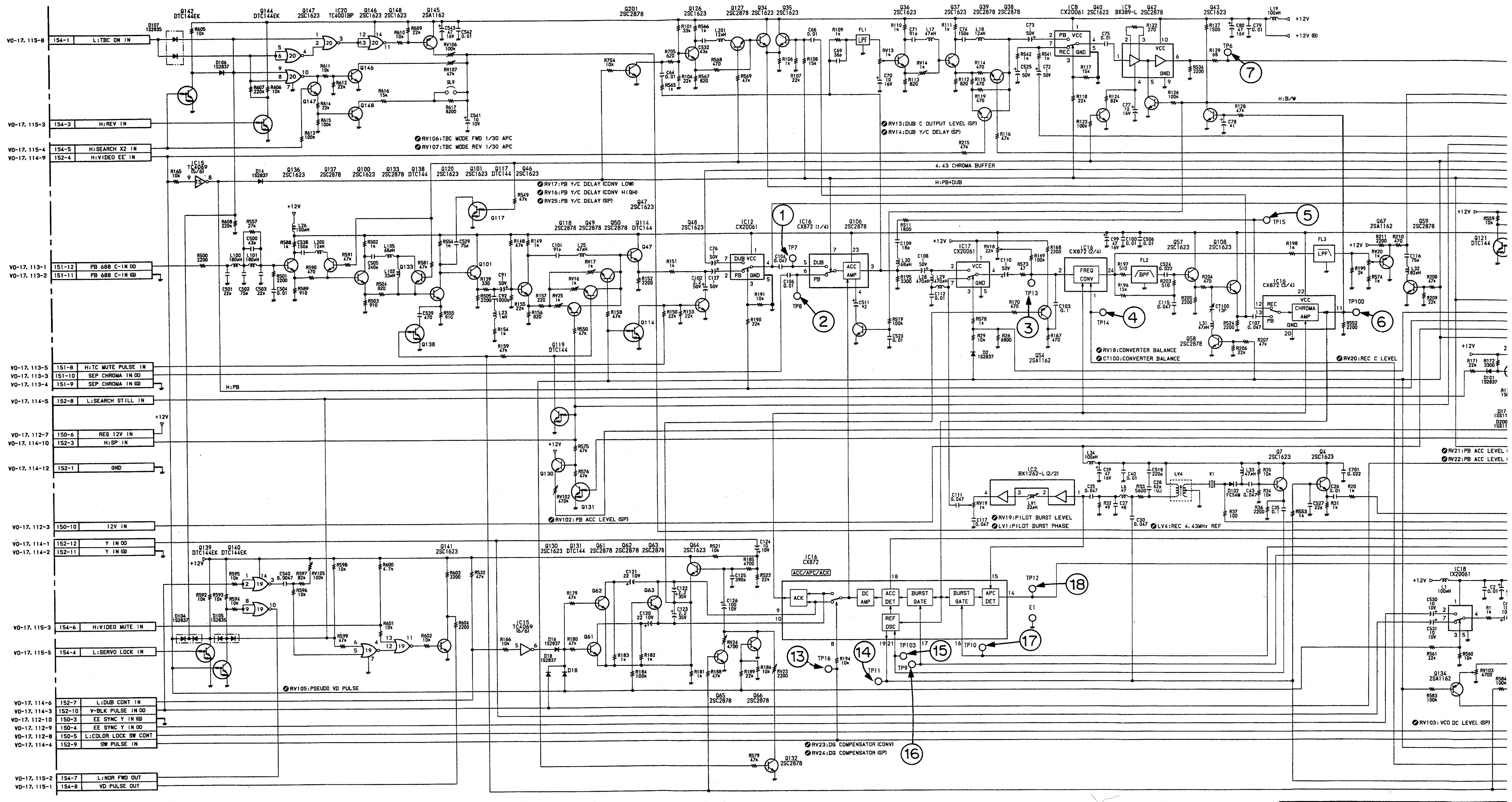
〈BOTTOM VIEW〉

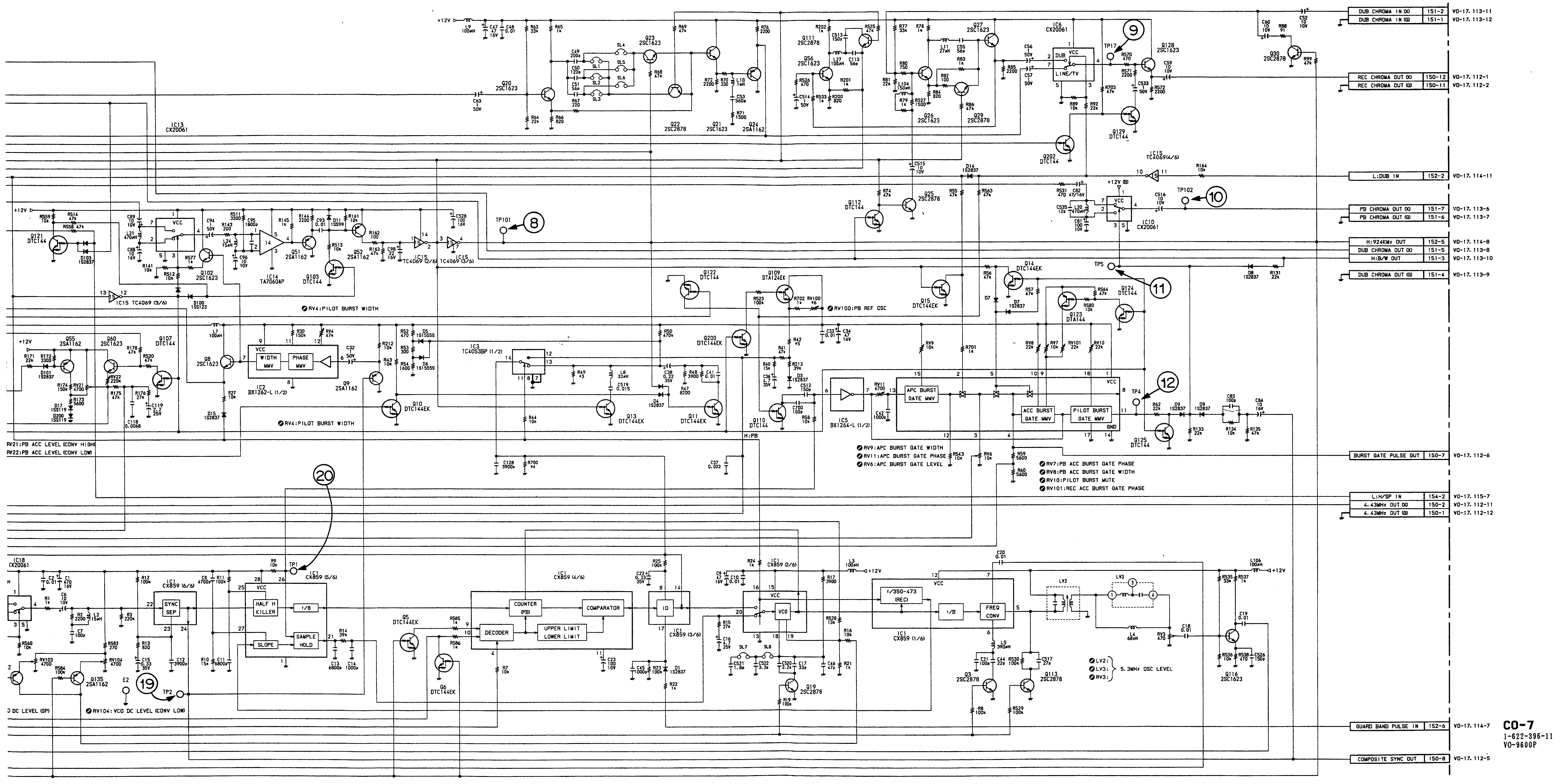


1	RP-35 Board
2	PTC-35 Board
3	IF-132 Board
4	PT-9 Board
5	TG-22 Board
6	PD-41 Board
7	PTC-35 Board

CO-7: COLOR REC/PB
EK;S/N 10001 thru 11100


VO-17. 115-8 154-1 L:TBC ON IN
VO-17. 115-3 154-3 H:REV IN
VO-17. 115-4 154-5 H:SEARCH X2 IN
VO-17. 114-9 152-4 H:VIDEO EE IN
VO-17. 113-1 151-12 PB 688 C-IN
VO-17. 113-2 151-11 PB 688 C-IN
VO-17. 113-5 151-8 H:TC MUTE PULSE IN
VO-17. 113-3 151-10 SEP CHROMA IN
VO-17. 113-4 151-9 SEP CHROMA IN
VO-17. 114-5 152-8 L:SEARCH STILL IN
VO-17. 112-7 150-6 REG 12V IN
VO-17. 114-10 152-3 H:SP IN
VO-17. 114-12 152-1 GND
VO-17. 112-3 150-10 12V IN
VO-17. 114-1 152-12 Y IN
VO-17. 114-2 152-11 Y IN
VO-17. 115-3 154-6 H:VIDEO MUTE IN
VO-17. 115-5 154-4 L:SERVO LOCK IN
VO-17. 114-6 152-7 L:DUB CONT IN
VO-17. 114-3 152-10 V-BLK PULSE IN
VO-17. 112-10 150-3 EE SYNC Y IN
VO-17. 112-9 150-4 EE SYNC Y IN
VO-17. 112-8 150-5 L:COLOR LOCK SW CONT
VO-17. 114-4 152-9 SW PULSE IN
VO-17. 115-2 154-7 L:NOR FWD OUT
VO-17. 115-1 154-8 VD PULSE OUT
RV106:TBC MODE FWD 1/30 APC
RV107:TBC MODE REV 1/30 APC
RV17:PB Y/C DELAY (CONV LOW)
RV16:PB Y/C DELAY (CONV HIGH)
RV25:PB Y/C DELAY (SP)
RV13:DUB C OUTPUT LEVEL (SP)
RV14:DUB Y/C DELAY (SP)
4.43 CHROMA BUFFER
H:PB+DUB
H:B/W
H:PB
RV18:CONVERTER BALANCE
CT100:CONVERTER BALANCE
RV20:REC C LEVEL
RV102:PB ACC LEVEL (SP)
RV19:PILOT BURST LEVEL
LV1:PILOT BURST PHASE
LV4:REC 4.43MHz REF
RV21:PB ACC LEVEL
RV22:PB ACC LEVEL
RV105:PSEUDO VD PULSE
RV23:DG COMPENSATOR (CONV)
RV24:DG COMPENSATOR (SP)
RV103:VCO DC LEVEL (SP)
IC16 CX872 ACC/APC/ACK
ACK
DC AMP
ACC DET
BURST GATE
APC DET
REF OSC
FREQ CONV
BPF
LPF
CHROMA AMP
DUB VCC PB GND
ACC AMP
IC2 BX1262-L (2/2)
IC18 CX20061
+12V
+12V (B)
TP1 TP6 TP7 TP8 TP9 TP10 TP11 TP12 TP13 TP14 TP15 TP16 TP100 TP103
① ② ③ ④ ⑤ ⑥ ⑦ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱

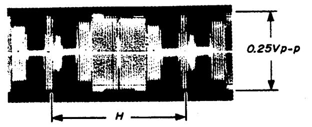
S/N	*1 C78	*2 C511	*3 R49
10001~10400	1/50	0.1 (NONPOLAR)	——
10401~11100	47/10	1/35	1M (ADDED)


DUB CHROMA IN (X) 151-2 VO-17, 113-11
DUB CHROMA IN (G) 151-1 VO-17, 113-12
REC CHROMA OUT (X) 150-12 VO-17, 112-1
REC CHROMA OUT (G) 150-11 VO-17, 112-2
L:DUB IN 152-2 VO-17, 114-11
PB CHROMA OUT (X) 151-7 VO-17, 113-6
PB CHROMA OUT (G) 151-6 VO-17, 113-7
H:924KHz OUT 152-5 VO-17, 114-8
DUB CHROMA OUT (X) 151-5 VO-17, 113-8
H:B/W OUT 151-3 VO-17, 113-10
DUB CHROMA OUT (G) 151-4 VO-17, 113-9
BURST GATE PULSE OUT 150-7 VO-17, 112-6
L:H/SP IN 154-2 VO-17, 115-7
4.43MHz OUT (X) 150-2 VO-17, 112-11
4.43MHz OUT (G) 150-1 VO-17, 112-12
GUARD BAND PULSE IN 152-6 VO-17, 114-7
COMPOSITE SYNC OUT 150-8 VO-17, 112-5
CO-7
1-622-396-11
VO-9600P
IC13 CX20061
IC6 CX20061
IC10 CX20061
IC18 CX20061
IC14 TA7060AP
IC15 TC4069
IC2 BX1262-L (1/2)
IC5 BX1264-L (1/2)
IC3 TC4053BP (1/2)
IC1 CX859
WIDTH MMV
PHASE MMV
APC BURST GATE MMV
ACC BURST GATE MMV
PILOT BURST GATE MMV
SYNC SEP
HALF H KILLER
SLOPE
SAMPLE HOLD
COUNTER (PB)
COMPARATOR
DECODER
UPPER LIMIT LOWER LIMIT
ID
VCO
f/350-473 (REC)
FREQ CONV
DUB LINE/TV
TP101
TP17
TP102
TP5
TP4
TP1
TP2
E2
⑧
⑨
⑩
⑪
⑫
⑲
⑳
RV4:PILOT BURST WIDTH
RV100:PB REF OSC
RV21:PB ACC LEVEL (CONV HIGH)
RV22:PB ACC LEVEL (CONV LOW)
RV9:APC BURST GATE WIDTH
RV11:APC BURST GATE PHASE
RV6:APC BURST GATE LEVEL
RV7:PB ACC BURST GATE PHASE
RV8:PB ACC BURST GATE WIDTH
RV10:PILOT BURST MUTE
RV101:REC ACC BURST GATE PHASE
RV104:VCO DC LEVEL (CONV LOW)
LV2:
LV3: 5.3MHz OSC LEVEL
RV3:
+12V

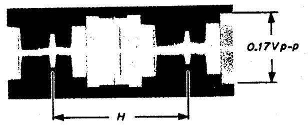
*3 R49	*4 R700	*5 R42	*6 RV100
——	1M	18K	4700
1M (ADDED)	DELETED	15K	10K

S/N	*7 L6	*8 C27	*9 R32
10001~10800	33μH	24P	1500
10801~	15μH	DELETED	680

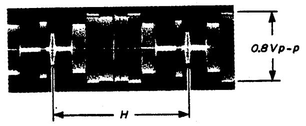
① TP7 PB



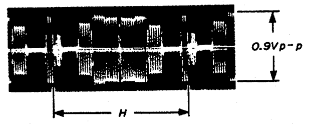
② TP8 REC



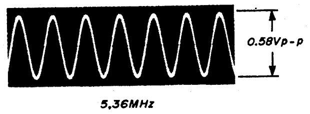
③ TP13 REC



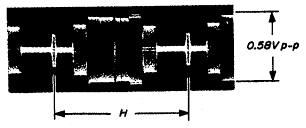
③ TP13 PB



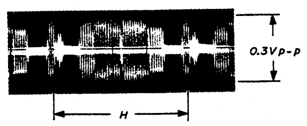
④ TP14 REC



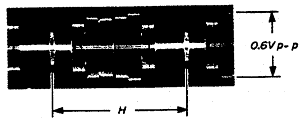
⑤ TP15 REC



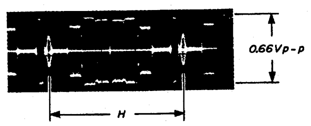
⑤ TP15 PB



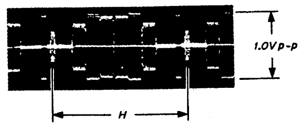
⑥ TP100 REC



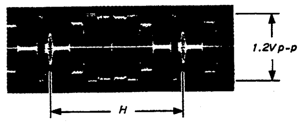
⑥ TP100 PB



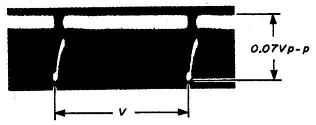
⑦ TP6 REC



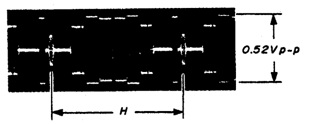
⑦ TP6 PB



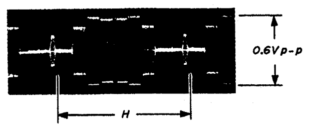
⑧ TP101 PB



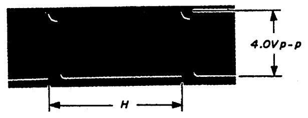
⑨ TP17 REC



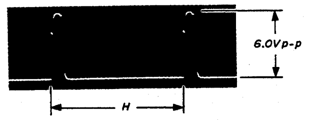
⑩ TP102 REC



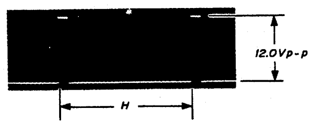
⑪ TP5 REC



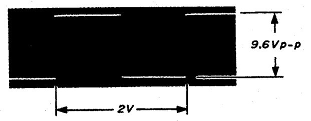
⑪ TP5 PB



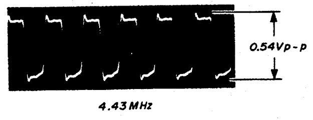
⑫ TP4 REC



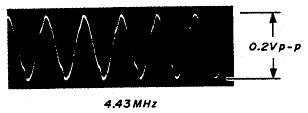
⑬ TP16 REC



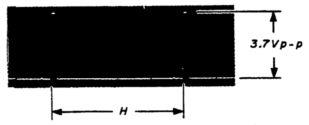
⑭ TP11 REC



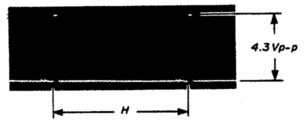
⑮ TP103 REC



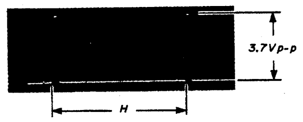
⑯ TP9 REC



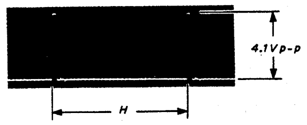
⑯ TP9 PB



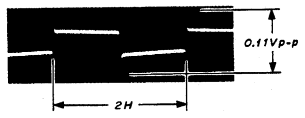
⑰ TP10 REC



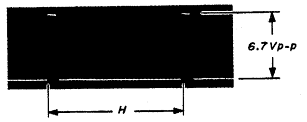
⑰ TP10 PB



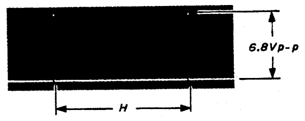
⑱ TP12 REC



⑲ TP2 REC



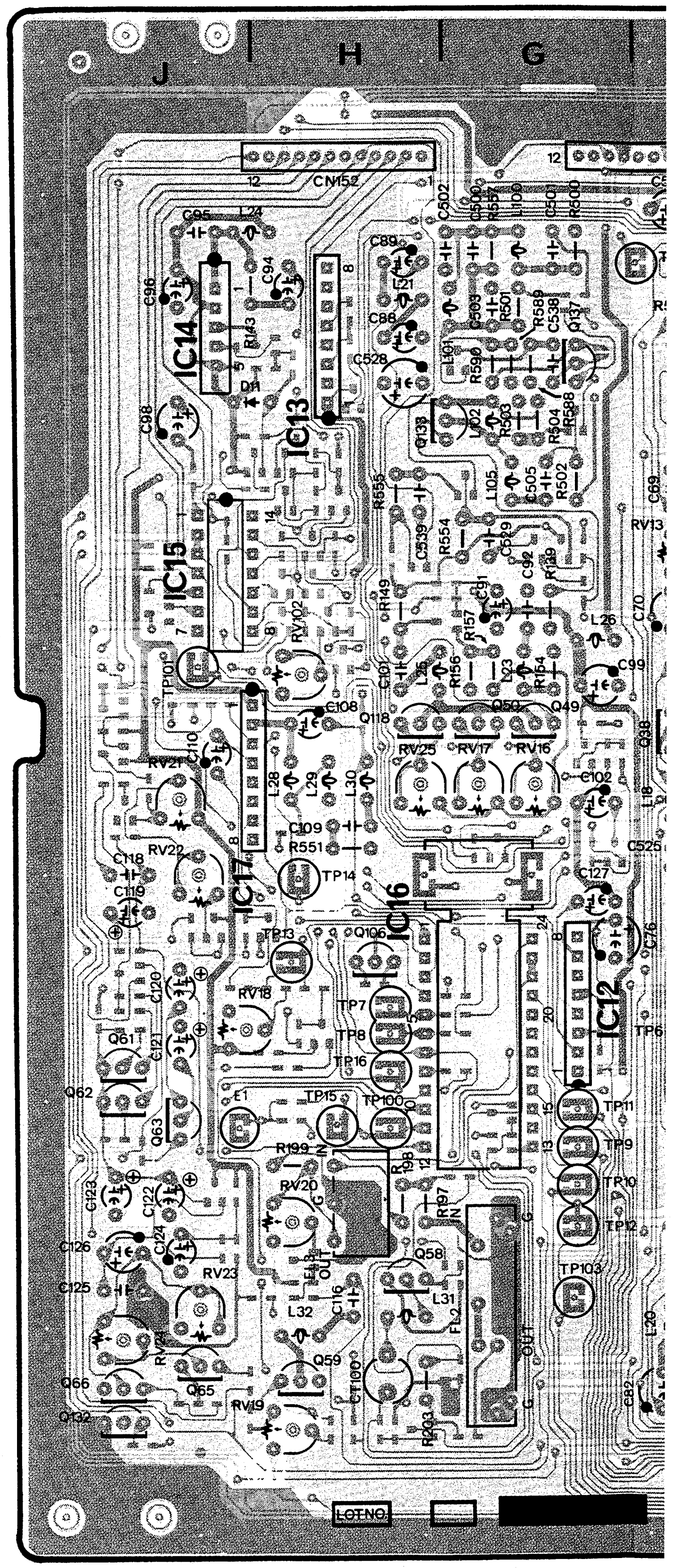
⑳ TP1 REC



CO-7: COLOR REC/PB
EK;S/N 10001 thru 11100

CO-7 (1-622-396-11)

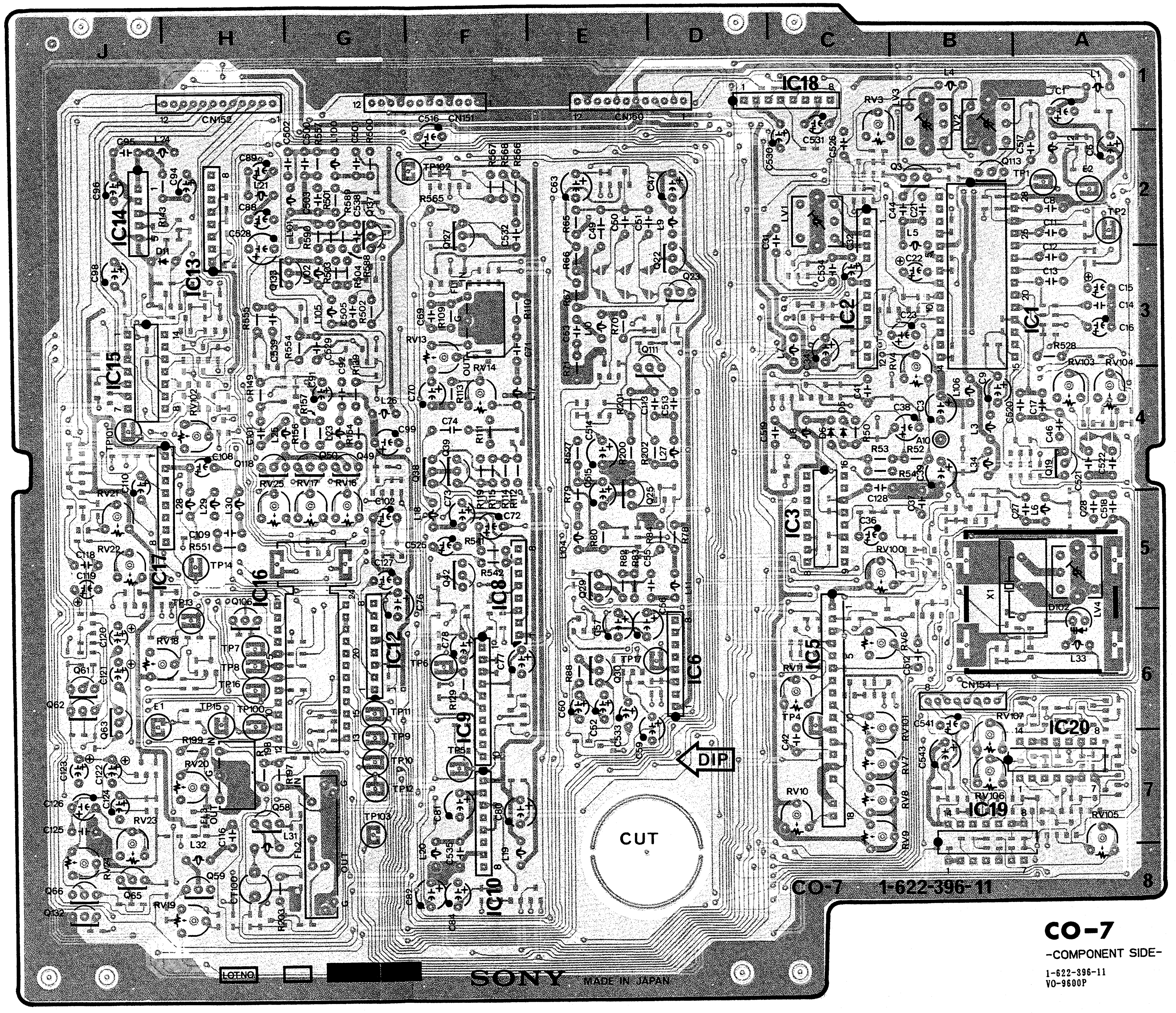
CN150	E-1
CN151	F-1
CN152	H-1
CN154	B-6
CT100	H-8
D5	C-4
D6	C-4
D11	H-3
D17	H-5
D102	A-6
D200	H-5
E1	J-6
E2	A-2
FL1	F-3
FL2	G-8
FL3	H-7
IC1	B-3
IC2	C-3
IC3	C-5
IC5	C-6
IC6	D-6
IC8	F-5
IC9	F-6
IC10	F-7
IC12	G-6
IC13	H-2
IC14	J-2
IC15	J-3
IC16	G-6
IC17	J-5
IC18	C-1
IC19	B-7
IC20	A-7
LV1	C-2
LV2	B-1
LV3	B-1
LV4	A-5
Q3	B-2
Q19	A-4
Q22	D-3
Q23	D-3
Q25	E-5
Q29	E-5
Q30	E-6
Q38	F-4
Q39	F-4
Q42	F-5
Q49	G-4
Q50	G-4
Q58	H-7
Q59	H-8
Q61	J-6
Q62	J-6
Q63	J-6
Q65	J-8
Q66	J-8
Q106	H-6
Q111	E-3
Q113	B-2
Q118	H-4
Q127	F-2
Q132	J-8
Q133	G-3
Q137	G-2
RV3	C-2
RV4	B-4
RV6	C-6
RV7	C-7
RV8	C-7
RV9	C-7
RV10	C-7
RV11	C-6
RV13	F-3
RV14	F-4
RV16	G-5
RV17	G-5
RV18	J-6
RV19	H-8
RV20	H-7
RV21	J-5
RV22	J-5
RV23	J-8
RV24	J-8
RV25	H-5
RV100	C-5
RV101	C-6
RV102	H-4
RV103	A-4
RV104	A-4
RV105	A-7
RV106	B-7
RV107	B-7
TP1	A-2
TP2	A-2
TP4	C-6
TP5	F-7
TP6	F-6
TP7	H-6
TP8	H-6
TP9	G-7
TP10	G-7
TP11	G-6
TP12	G-7
TP13	H-6
TP15	H-6
TP16	H-6
TP17	D-6
TP100	H-6
TP101	J-4
TP102	G-2
TP103	G-7
TP104	A-7
X1	B-5


J
H
G
CN152
IC14
IC13
IC15
IC17
IC16
IC12
TP14
TP13
TP7
TP8
TP16
TP15
TP100
TP11
TP9
TP10
TP12
TP103
RV18
RV20
RV21
RV22
RV23
RV24
RV25
RV17
RV16
Q50
Q49
Q58
Q59
Q61
Q62
Q63
Q65
Q66
Q106
Q118
Q132
LOT NO

CO-7: COLOR REC/PB
EK;S/N 10001 thru 11100

CO-7 (1-622-396-11)

CN150	E-1
CN151	F-1
CN152	H-1
CN154	B-6
CT100	H-8
D5	C-4
D6	C-4
D11	H-3
D17	H-5
D102	A-6
D200	H-5
E1	J-6
E2	A-2
FL1	F-3
FL2	G-8
FL3	H-7
IC1	B-3
IC2	C-3
IC3	C-5
IC5	C-6
IC6	D-6
IC8	F-5
IC9	F-6
IC10	F-7
IC12	G-6
IC13	H-2
IC14	J-2
IC15	J-3
IC16	G-6
IC17	J-5
IC18	C-1
IC19	B-7
IC20	A-7
LV1	C-2
LV2	B-1
LV3	B-1
LV4	A-5
Q3	B-2
Q19	A-4
Q22	D-3
Q23	D-3
Q25	E-5
Q29	E-5
Q30	E-6
Q38	F-4
Q39	F-4
Q42	F-5
Q49	G-4
Q50	G-4
Q58	H-7
Q59	H-8
Q61	J-6
Q62	J-6
Q63	J-6
Q65	J-8
Q66	J-8
Q106	H-6
Q111	E-3
Q113	B-2
Q118	H-4
Q127	F-2
Q132	J-8
Q133	G-3
Q137	G-2
RV3	C-2
RV4	B-4
RV6	C-6
RV7	C-7
RV8	C-7
RV9	C-7
RV10	C-7
RV11	C-6
RV13	F-3
RV14	F-4
RV16	G-5
RV17	G-5
RV18	J-6
RV19	H-8
RV20	H-7
RV21	J-5
RV22	J-5
RV23	J-8
RV24	J-8
RV25	H-5
RV100	C-5
RV101	C-6
RV102	H-4
RV103	A-4
RV104	A-4
RV105	A-7
RV106	B-7
RV107	B-7
TP1	A-2
TP2	A-2
TP4	C-6
TP5	F-7
TP6	F-6
TP7	H-6
TP8	H-6
TP9	G-7
TP10	G-7
TP11	G-6
TP12	G-7
TP13	H-6
TP15	H-6
TP16	H-6
TP17	D-6
TP100	H-6
TP101	J-4
TP102	G-2
TP103	G-7
TP104	A-7
X1	B-5

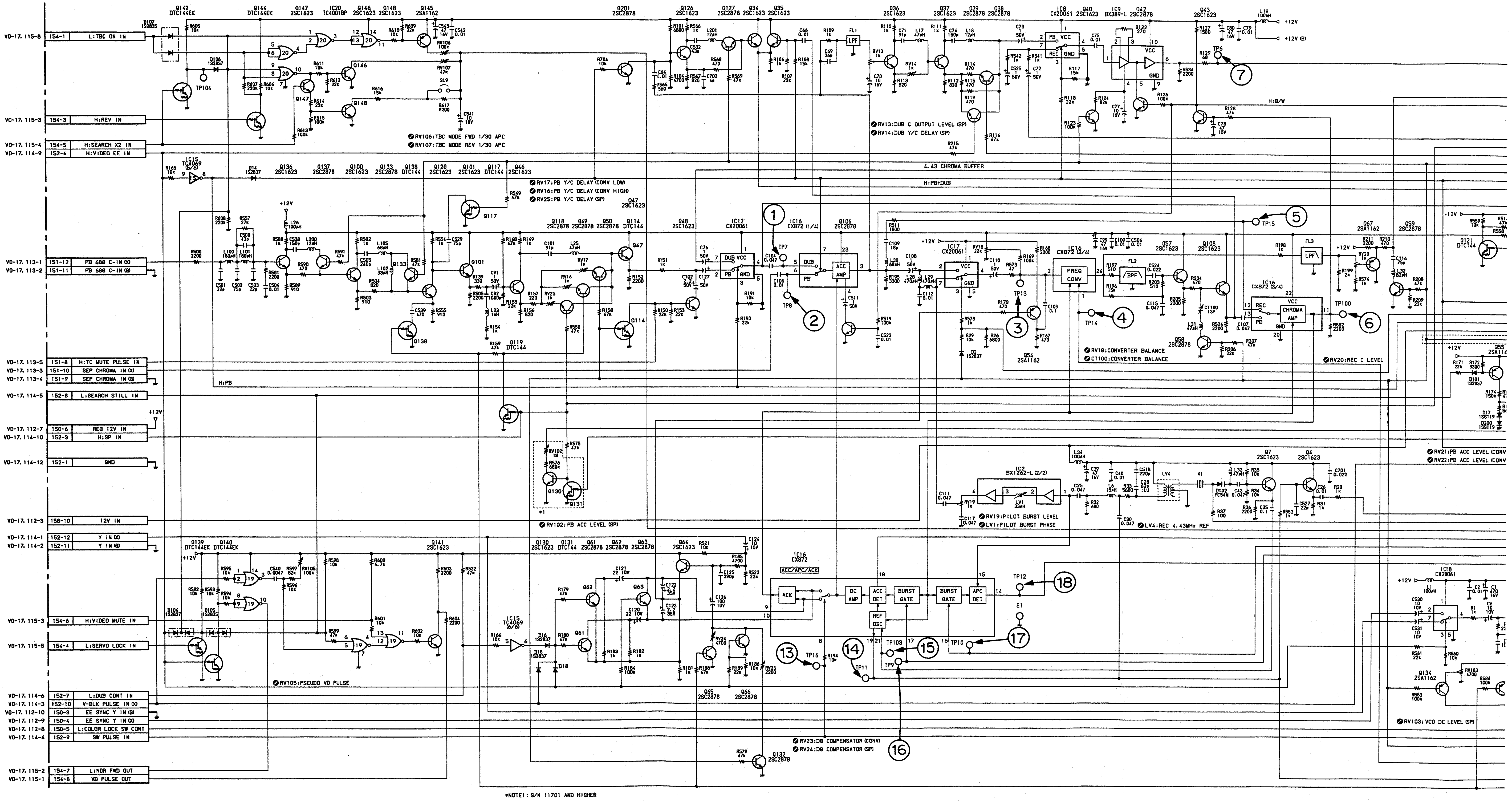

J
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
IC1
IC2
IC3
IC5
IC6
IC8
IC9
IC10
IC12
IC13
IC14
IC15
IC16
IC17
IC18
IC19
IC20
CN152
CN151
CN150
CN154
DIP
CUT
CO-7 1-622-396-11
LOT NO
SONY
MADE IN JAPAN

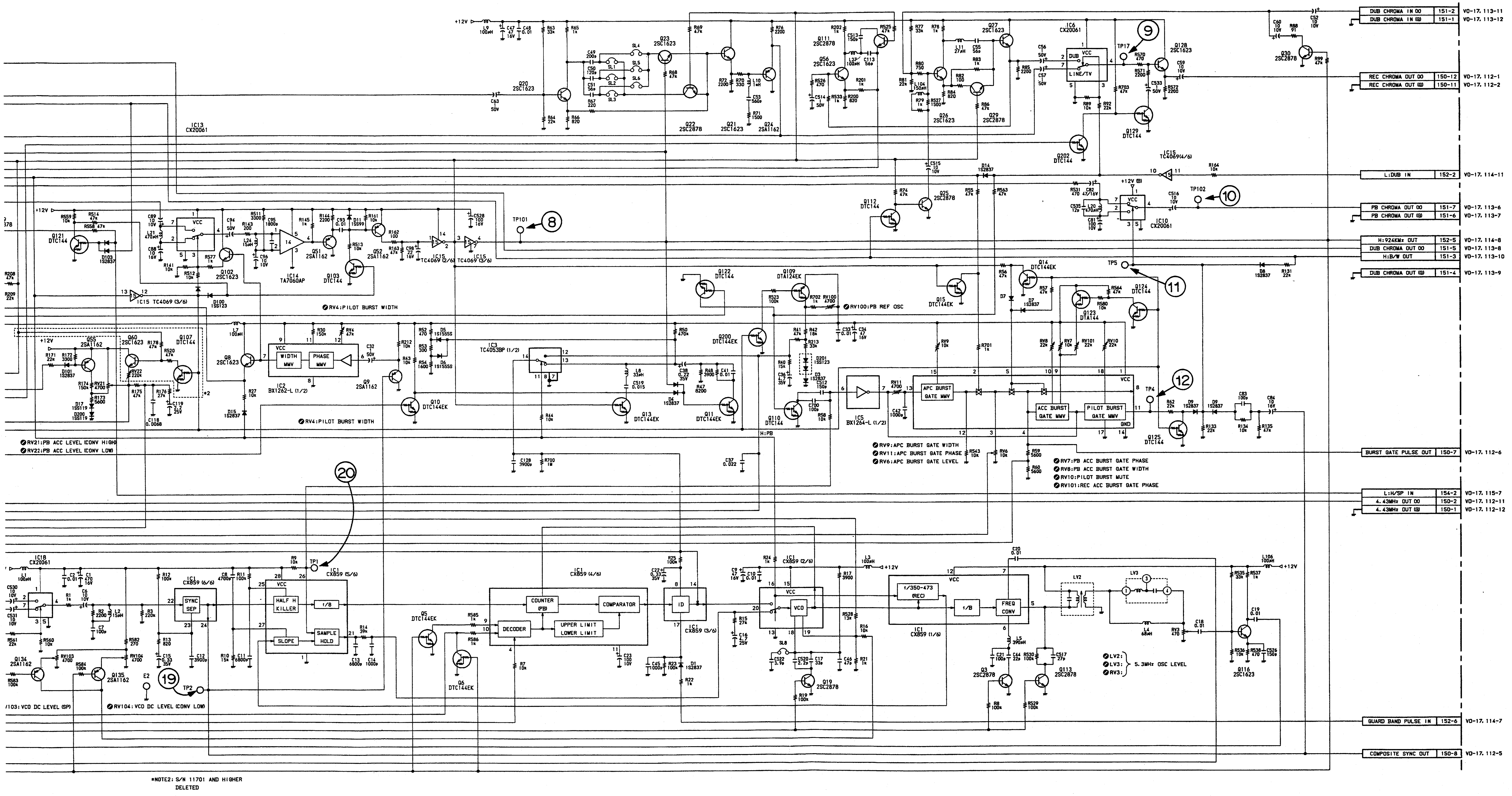
CO-7

-COMPONENT SIDE-

1-622-396-11
VO-9600P

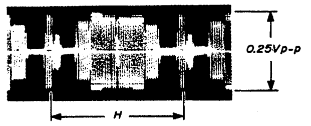
CO-7: COLOR REC/PB
EK;S/N 11101 and higher


VO-17, 115-8 154-1 L:TBC ON IN
VO-17, 115-3 154-3 H:REV IN
VO-17, 115-4 154-5 H:SEARCH X2 IN
VO-17, 114-9 152-4 H:VIDEO EE IN
VO-17, 113-1 151-12 PB 688 C-IN (O)
VO-17, 113-2 151-11 PB 688 C-IN (G)
VO-17, 113-5 151-8 H:TC MUTE PULSE IN
VO-17, 113-3 151-10 SEP CHROMA IN (O)
VO-17, 113-4 151-9 SEP CHROMA IN (G)
VO-17, 114-5 152-8 L:SEARCH STILL IN
VO-17, 112-7 150-6 REG 12V IN
VO-17, 114-10 152-3 H:SP IN
VO-17, 114-12 152-1 GND
VO-17, 112-3 150-10 12V IN
VO-17, 114-1 152-12 Y IN (O)
VO-17, 114-2 152-11 Y IN (G)
VO-17, 115-3 154-6 H:VIDEO MUTE IN
VO-17, 115-5 154-4 L:SERVO LOCK IN
VO-17, 114-6 152-7 L:DUB CONT IN
VO-17, 114-3 152-10 V-BLK PULSE IN (O)
VO-17, 112-10 150-3 EE SYNC Y IN (G)
VO-17, 112-9 150-4 EE SYNC Y IN (O)
VO-17, 112-8 150-5 L:COLOR LOCK SW CONT
VO-17, 114-4 152-9 SW PULSE IN
VO-17, 115-2 154-7 L:NOR FWD OUT
VO-17, 115-1 154-8 VD PULSE OUT
RV106:TBC MODE FWD 1/30 APC
RV107:TBC MODE REV 1/30 APC
RV17:PB Y/C DELAY (CONV LOW)
RV16:PB Y/C DELAY (CONV HIGH)
RV25:PB Y/C DELAY (SP)
RV13:DUB C OUTPUT LEVEL (SP)
RV14:DUB Y/C DELAY (SP)
4.43 CHROMA BUFFER
H:PB+DUB
H:PB
H:B/W
DUB
ACC AMP
FREQ CONV
BPF
LPF
CHROMA AMP
RV18:CONVERTER BALANCE
CT100:CONVERTER BALANCE
RV20:REC C LEVEL
RV21:PB ACC LEVEL (CONV
RV22:PB ACC LEVEL (CONV
RV102:PB ACC LEVEL (SP)
RV19:PILOT BURST LEVEL
LV1:PILOT BURST PHASE
LV4:REC 4.43MHz REF
IC16 CX872 ACC/APC/ACK
ACK
DC AMP
ACC DET
BURST GATE
APC DET
REF OSC
RV105:PSEUDO VD PULSE
RV23:DG COMPENSATOR (CONV)
RV24:DG COMPENSATOR (SP)
RV103:VCO DC LEVEL (SP)
*NOTE1: S/N 11701 AND HIGHER

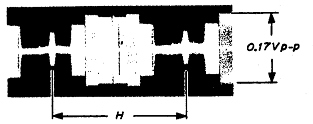

+12V
IC13 CX20061
IC6 CX20061
DUB
LINE/TV
VCC
TP17
TP101
TP102
TP5
TP4
TP1
TP2
E2
IC15 TC4069(4/6)
IC15 TC4069 (3/6)
IC15 TC4069 (2/6)
IC14 TA7060AP
IC10 CX20061
IC2 BX1262-L (1/2)
WIDTH MMV
PHASE MMV
IC3 TC4053BP (1/2)
IC5 BX1264-L (1/2)
APC BURST GATE MMV
ACC BURST GATE MMV
PILOT BURST GATE MMV
GND
H:PB
IC18 CX20061
IC1 CX859 (6/6)
SYNC SEP
IC1 CX859 (5/6)
HALF H KILLER
1/8
SLOPE
SAMPLE HOLD
IC1 CX859 (4/6)
COUNTER (PB)
COMPARATOR
DECODER
UPPER LIMIT
LOWER LIMIT
ID
IC1 CX859 (3/6)
IC1 CX859 (2/6)
VCO
IC1 CX859 (1/6)
1/350-473 (REC)
1/8
FREQ CONV
LY2
LV3
⑧
⑨
⑩
⑪
⑫
⑲
⑳
RV4:PILOT BURST WIDTH
RV100:PB REF OSC
RV21:PB ACC LEVEL (CONV HIGH)
RV22:PB ACC LEVEL (CONV LOW)
RV9:APC BURST GATE WIDTH
RV11:APC BURST GATE PHASE
RV6:APC BURST GATE LEVEL
RV7:PB ACC BURST GATE PHASE
RV8:PB ACC BURST GATE WIDTH
RV10:PILOT BURST MUTE
RV101:REC ACC BURST GATE PHASE
RV103:VCO DC LEVEL (SP)
RV104:VCO DC LEVEL (CONV LOW)
LV2, LV3, RV3: 5.3MHz OSC LEVEL
*2
*NOTE2: S/N 11701 AND HIGHER DELETED
DUB CHROMA IN (X) 151-2 VO-17, 113-11
DUB CHROMA IN (G) 151-1 VO-17, 113-12
REC CHROMA OUT (X) 150-12 VO-17, 112-1
REC CHROMA OUT (G) 150-11 VO-17, 112-2
L:DUB IN 152-2 VO-17, 114-11
PB CHROMA OUT (X) 151-7 VO-17, 113-6
PB CHROMA OUT (G) 151-6 VO-17, 113-7
H:924KHz OUT 152-5 VO-17, 114-8
DUB CHROMA OUT (X) 151-5 VO-17, 113-8
H:B/W OUT 151-3 VO-17, 113-10
DUB CHROMA OUT (G) 151-4 VO-17, 113-9
BURST GATE PULSE OUT 150-7 VO-17, 112-6
L:H/SP IN 154-2 VO-17, 115-7
4.43MHz OUT (X) 150-2 VO-17, 112-11
4.43MHz OUT (G) 150-1 VO-17, 112-12
GUARD BAND PULSE IN 152-6 VO-17, 114-7
COMPOSITE SYNC OUT 150-8 VO-17, 112-5

CO-7
1-622-396-12
VO-9600P

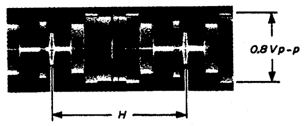
① TP7 PB



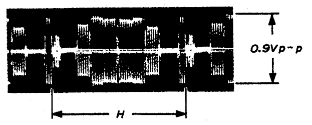
② TP8 REC



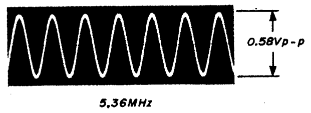
③ TP13 REC



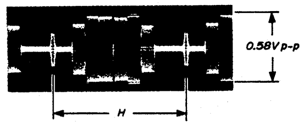
③ TP13 PB



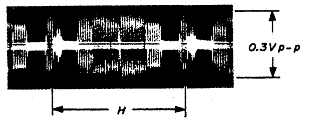
④ TP14 REC



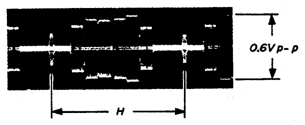
⑤ TP15 REC



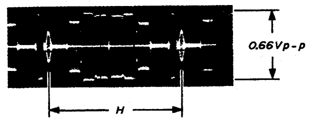
⑤ TP15 PB



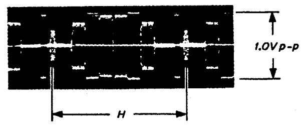
⑥ TP100 REC



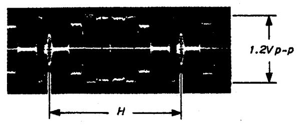
⑥ TP100 PB



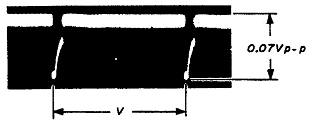
⑦ TP6 REC



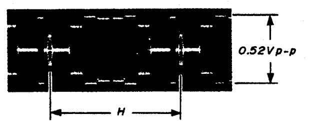
⑦ TP6 PB



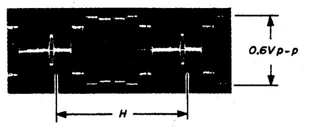
⑧ TP101 PB



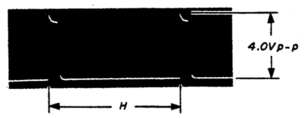
⑨ TP17 REC



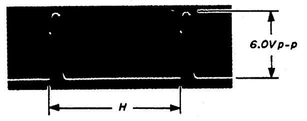
⑩ TP102 REC



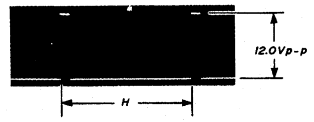
⑪ TP5 REC



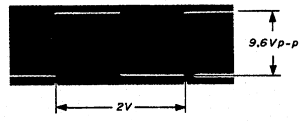
⑪ TP5 PB



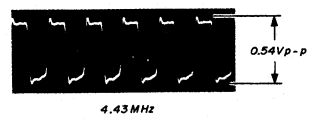
⑫ TP4 REC



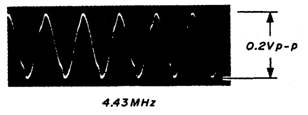
⑬ TP16 REC



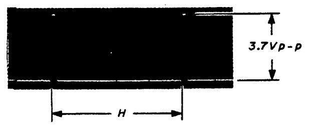
⑭ TP11 REC



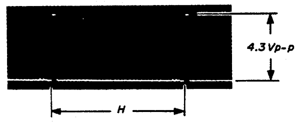
⑮ TP103 REC



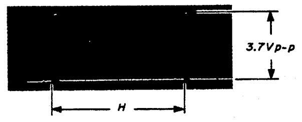
⑯ TP9 REC



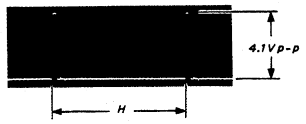
⑯ TP9 PB



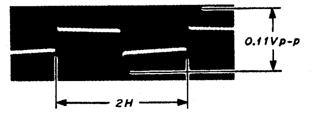
⑰ TP10 REC



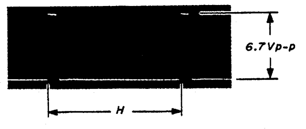
⑰ TP10 PB



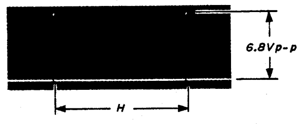
⑱ TP12 REC



⑲ TP2 REC



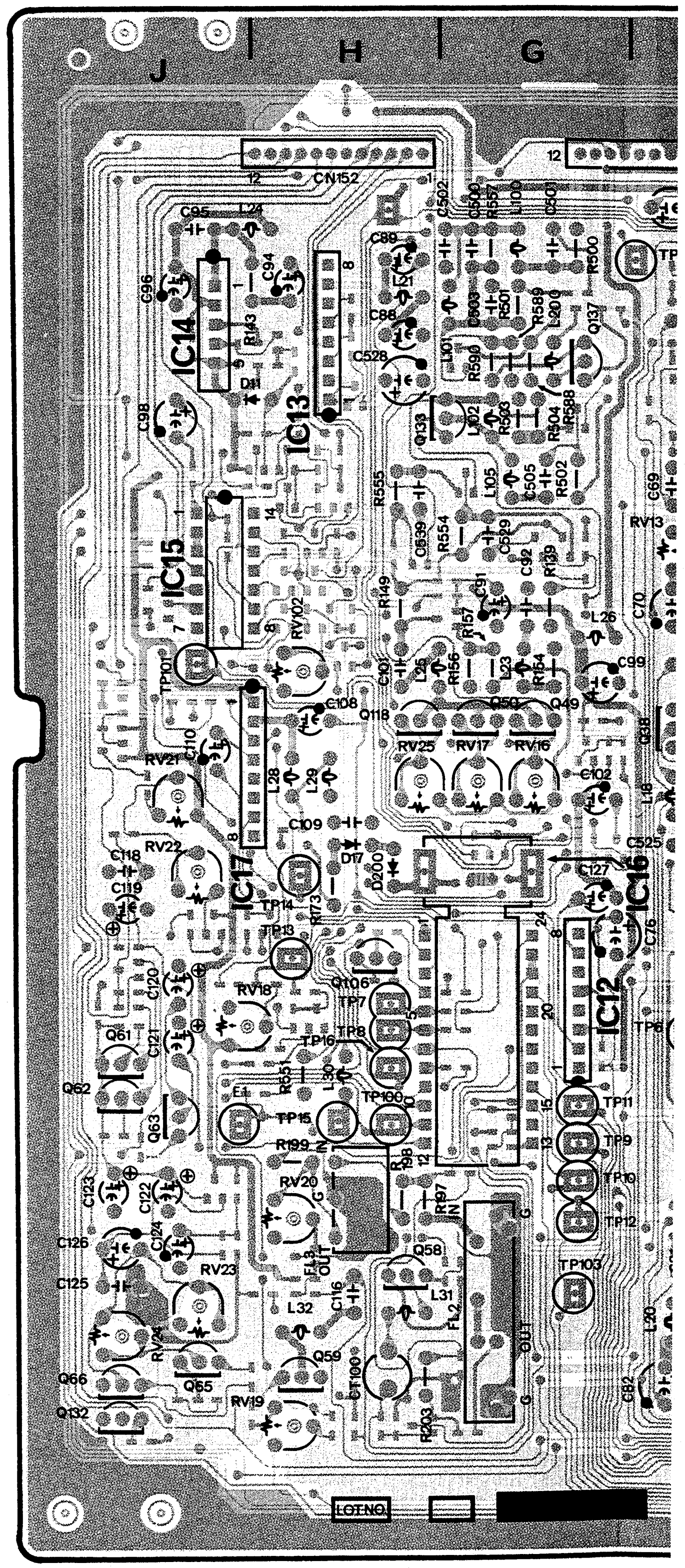
⑳ TP1 REC



CO-7: COLOR REC/PB
EK;S/N 11101 and higher

CO-7 (1-622-396-12)

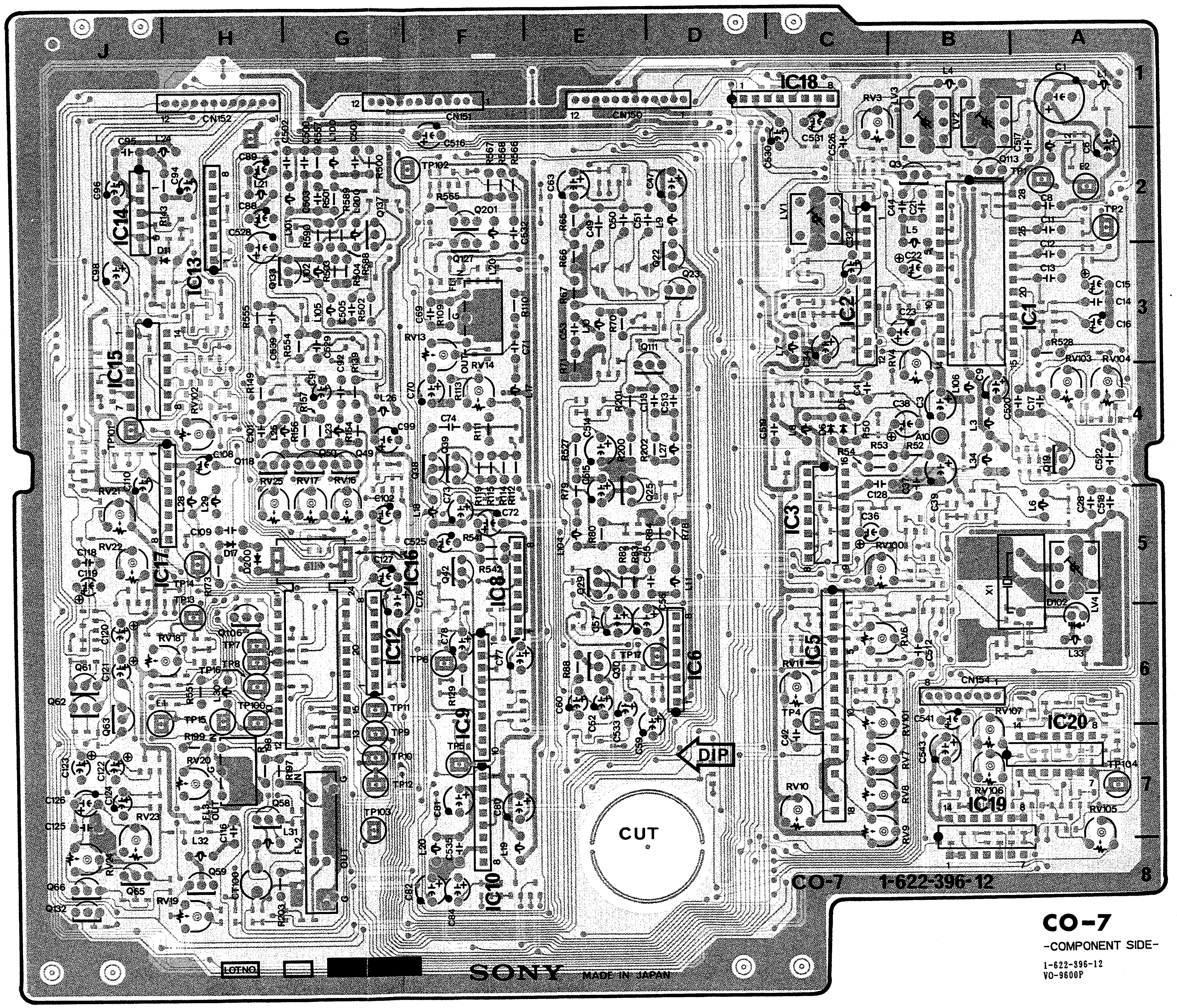
CN150	E-1
CN151	F-1
CN152	H-1
CN154	B-6
CT100	H-8
D5	C-4
D6	C-4
D11	H-3
D17	H-5
D102	A-6
D200	H-5
E1	J-6
E2	A-2
FL1	F-3
FL2	G-8
FL3	H-7
IC1	B-3
IC2	C-3
IC3	C-5
IC5	C-6
IC6	D-6
IC8	F-5
IC9	F-6
IC10	F-7
IC12	G-6
IC13	H-2
IC14	J-2
IC15	J-3
IC16	G-6
IC17	J-5
IC18	C-1
IC19	B-7
IC20	A-7
LV1	C-2
LV2	B-1
LV3	B-1
LV4	A-5
Q3	B-2
Q19	A-4
Q22	D-3
Q23	D-3
Q25	E-5
Q29	E-5
Q30	E-6
Q38	F-4
Q39	F-4
Q42	F-5
Q49	G-4
Q50	G-4
Q58	H-7
Q59	H-8
Q61	J-6
Q62	J-6
Q63	J-6
Q65	J-8
Q66	J-8
Q106	H-6
Q111	E-3
Q113	B-2
Q118	H-4
Q127	F-2
Q132	J-8
Q133	G-3
Q137	G-2
Q201	F-2
RV3	C-2
RV4	B-4
RV6	C-6
RV7	C-7
RV8	C-7
RV9	C-7
RV10	C-7
RV11	C-6
RV13	F-3
RV14	F-4
RV16	G-5
RV17	G-5
RV18	J-6
RV19	H-8
RV20	H-7
RV21	J-5
RV22	J-5
RV23	J-8
RV24	J-8
RV25	H-5
RV100	C-5
RV101	C-6
RV102	H-4
RV103	A-4
RV104	A-4
RV105	A-7
RV106	B-7
RV107	B-7
TP1	A-2
TP2	A-2
TP4	C-6
TP5	F-7
TP6	F-6
TP7	H-6
TP8	H-6
TP9	G-7
TP10	G-7
TP11	G-6
TP12	G-7
TP13	H-6
TP14	H-5
TP15	H-6
TP16	H-6
TP17	D-6
TP100	H-6
TP101	J-4
TP102	G-2
TP103	G-7
TP104	A-7
X1	B-5


J
H
G
CN152
12
IC14
IC13
IC15
IC17
IC16
IC12
TP101
TP14
TP13
TP7
TP8
TP15
TP16
TP100
TP11
TP9
TP10
TP12
TP103
RV21
RV22
RV18
RV20
RV23
RV19
RV25
RV17
RV16
RV13
Q61
Q62
Q63
Q66
Q132
Q65
Q59
Q58
Q106
Q118
Q50
Q49
Q133
Q137
D11
D17
D200
C95
C96
C98
C94
C89
C86
C528
C108
C109
C110
C118
C119
C120
C121
C122
C123
C124
C125
C126
C101
C102
C99
C525
C127
C76
C69
C70
CT100
FL2
L24
L26
L28
L29
L30
L31
L32
L18
L20
E1
R143
R149
R555
R554
R651
R199
R173
R197
OUT
IN
CB2
LOT NO.

CO-7: COLOR REC/PB
EK;S/N 11101 and higher

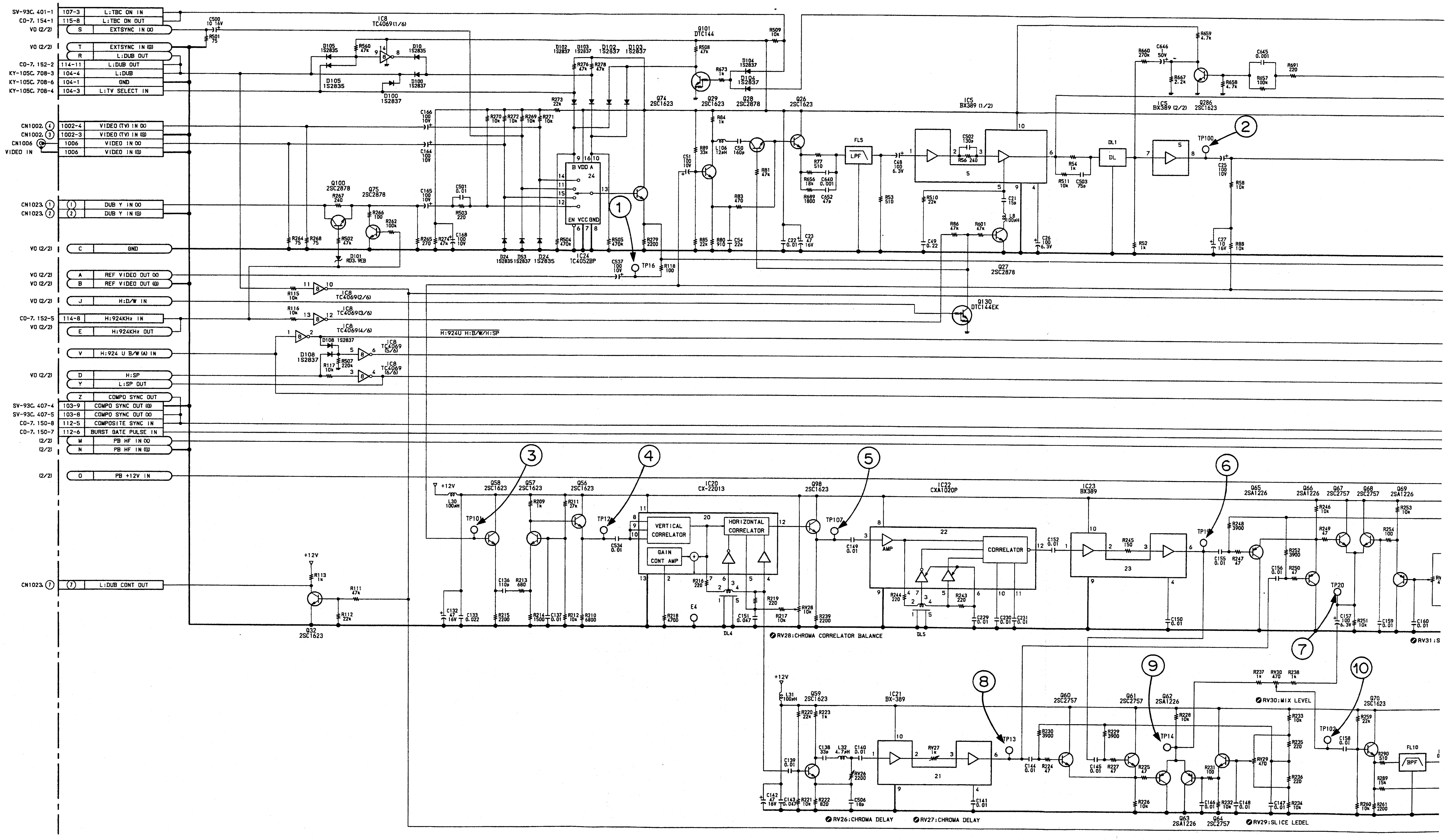
CO-7 (1-622-396-12)

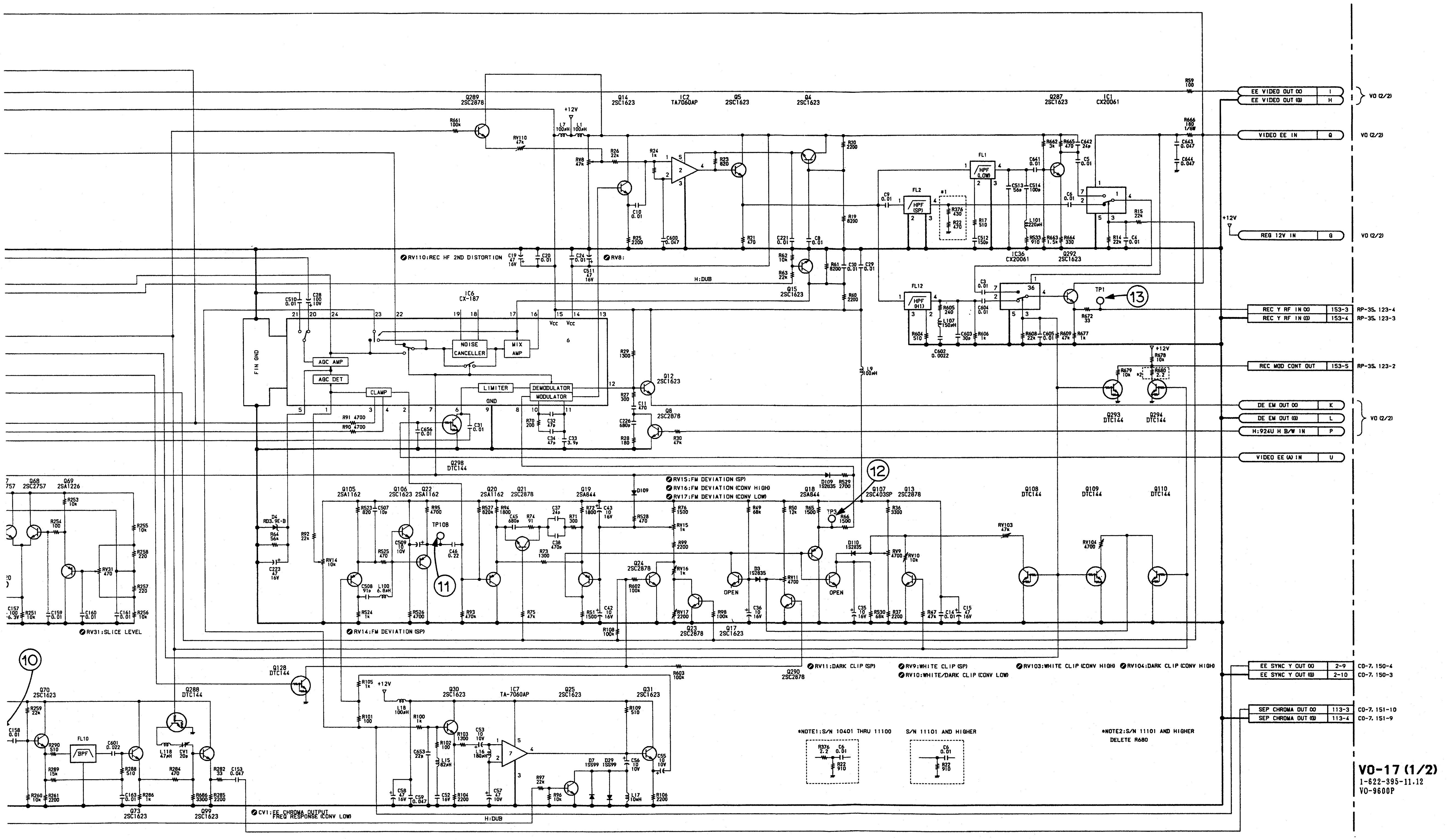
CN150	E-1
CN151	F-1
CN152	H-1
CN154	B-6
CT100	H-8
D5	C-4
D6	C-4
D11	H-3
D17	H-5
D102	A-6
D200	H-5
E1	J-6
E2	A-2
FL1	F-3
FL2	G-8
FL3	H-7
IC1	B-3
IC2	C-3
IC3	C-5
IC5	C-6
IC6	D-6
IC8	F-5
IC9	F-6
IC10	F-7
IC12	G-6
IC13	H-2
IC14	J-2
IC15	J-3
IC16	G-6
IC17	J-5
IC18	C-1
IC19	B-7
IC20	A-7
LV1	C-2
LV2	B-1
LV3	B-1
LV4	A-5
Q3	B-2
Q19	A-4
Q22	D-3
Q23	D-3
Q25	E-5
Q29	E-5
Q30	E-6
Q38	F-4
Q39	F-4
Q42	F-5
Q49	G-4
Q50	G-4
Q58	H-7
Q59	H-8
Q61	J-6
Q62	J-6
Q63	J-6
Q65	J-8
Q66	J-8
Q106	H-6
Q111	E-3
Q113	B-2
Q118	H-4
Q127	F-2
Q132	J-8
Q133	G-3
Q137	G-2
Q201	F-2
RV3	C-2
RV4	B-4
RV6	C-6
RV7	C-7
RV8	C-7
RV9	C-7
RV10	C-7
RV11	C-6
RV13	F-3
RV14	F-4
RV16	G-5
RV17	G-5
RV18	J-6
RV19	H-8
RV20	H-7
RV21	J-5
RV22	J-5
RV23	J-8
RV24	J-8
RV25	H-5
RV100	C-5
RV101	C-6
RV102	H-4
RV103	A-4
RV104	A-4
RV105	A-7
RV106	B-7
RV107	B-7
TP1	A-2
TP2	A-2
TP4	C-6
TP5	F-7
TP6	F-6
TP7	H-6
TP8	H-6
TP9	G-7
TP10	G-7
TP11	G-6
TP12	G-7
TP13	H-6
TP14	H-5
TP15	H-6
TP16	H-6
TP17	D-6
TP100	H-6
TP101	J-4
TP102	G-2
TP103	G-7
TP104	A-7
X1	B-5


J
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
CN152
CN151
CN150
CN154
IC18
IC14
IC13
IC15
IC17
IC16
IC12
IC9
IC10
IC8
IC6
IC5
IC3
IC2
IC1
IC19
IC20
DIP
CUT
CO-7 1-622-396-12
LOT NO.
SONY
MADE IN JAPAN

CO-7
-COMPONENT SIDE-
1-622-396-12
VO-9600P

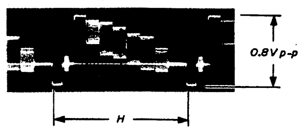
VO-17(1/2): Y REC/PB (Y/C SEPARATOR)
EK;S/N 10001 and higher


L:TBC ON IN
L:TBC ON OUT
EXTSYNC IN
EXTSYNC IN
L:DUB OUT
L:DUB OUT
L:DUB
GND
L:TV SELECT IN
VIDEO (TV) IN
VIDEO (TV) IN
VIDEO IN
VIDEO IN
DUB Y IN
DUB Y IN
GND
REF VIDEO OUT
REF VIDEO OUT
H:D/W IN
H:924KHz IN
H:924KHz OUT
H:924 U B/W (A) IN
H:SP
L:SP OUT
COMPO SYNC OUT
COMPO SYNC OUT
COMPO SYNC OUT
COMPOSITE SYNC IN
BURST GATE PULSE IN
PB HF IN
PB HF IN
PB +12V IN
L:DUB CONT OUT
IC8 TC4069
IC24 TC4052BP
IC5 BX389
IC20 CX-22013
IC22 CXA1020P
IC23 BX389
IC21 BX-389
VERTICAL CORRELATOR
HORIZONTAL CORRELATOR
GAIN CONT AMP
AMP
CORRELATOR
LPF
DL
BPF
FL5
FL10
H:924U H:B/W/H:SP
RV28:CHROMA CORRELATOR BALANCE
RV26:CHROMA DELAY
RV27:CHROMA DELAY
RV29:SLICE LEDEL
RV30:MIX LEVEL
TP16
TP100
TP101
TP12
TP107
TP19
TP20
TP13
TP14
TP102
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩

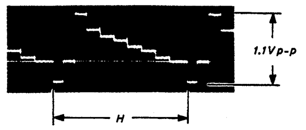

EE VIDEO OUT (X) | I
EE VIDEO OUT (G) | H
VO (2/2)
VIDEO EE IN | Q
VO (2/2)
+12V
REG 12V IN | G
VO (2/2)
REC Y RF IN (X) | 153-3 | RP-35, 123-4
REC Y RF IN (G) | 153-4 | RP-35, 123-3
REC MOD CONT OUT | 153-5 | RP-35, 123-2
DE EM OUT (X) | K
DE EM OUT (G) | L
H:924U H B/W IN | P
VO (2/2)
VIDEO EE (A) IN | U
EE SYNC Y OUT (X) | 2-9 | CO-7, 150-4
EE SYNC Y OUT (G) | 2-10 | CO-7, 150-3
SEP CHROMA OUT (X) | 113-3 | CO-7, 151-10
SEP CHROMA OUT (G) | 113-4 | CO-7, 151-9
IC1 CX20061
IC2 TA7060AP
IC6 CX-187
IC7 TA-7060AP
IC36 CX20061
AGC AMP
AGC DET
CLAMP
NOISE CANCELLER
MIX AMP
LIMITER
DEMODULATOR
MODULATOR
FIN GND
FL1 HPF (LOW)
FL2 HPF (SP)
FL12 HPF (HI)
FL10 BPF
TP1
TP3
TP108
H:DUB
OPEN
⑩
⑪
⑫
⑬
RV110:REC HF 2ND DISTORTION
RV8:
RV15:FM DEVIATION (SP)
RV16:FM DEVIATION (CONV HIGH)
RV17:FM DEVIATION (CONV LOW)
RV14:FM DEVIATION (SP)
RV31:SLICE LEVEL
CV1:EE CHROMA OUTPUT FREQ RESPONSE (CONV LOW)
RV11:DARK CLIP (SP)
RV9:WHITE CLIP (SP)
RV10:WHITE/DARK CLIP (CONV LOW)
RV103:WHITE CLIP (CONV HIGH)
RV104:DARK CLIP (CONV HIGH)
*NOTE1:S/N 10401 THRU 11100
S/N 11101 AND HIGHER
R376 2.2
C6 0.01
R22 910
*NOTE2:S/N 11101 AND HIGHER
DELETE R680
VO-17 (1/2)
1-622-395-11.12
VO-9600P

VO-17(1/2)

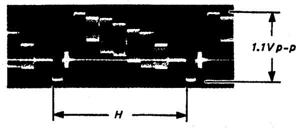
① TP16
REC



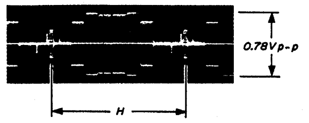
② TP100
REC



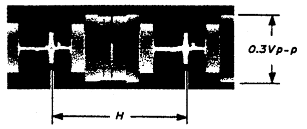
③ TP101
REC



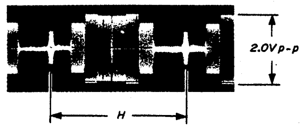
④ TP12
REC



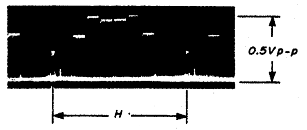
⑤ TP107
REC



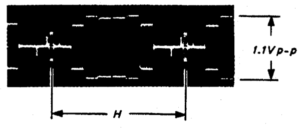
⑥ TP19
REC



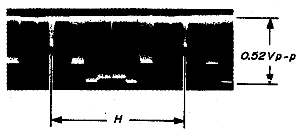
⑦ TP20
REC



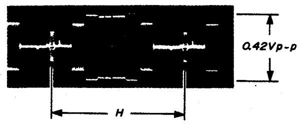
⑧ TP13
REC



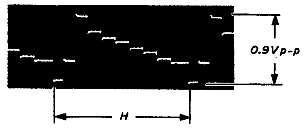
⑨ TP14
REC



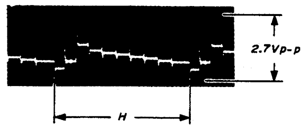
⑩ TP102
REC



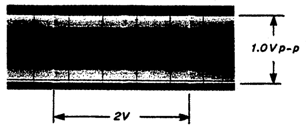
⑪ TP108
REC



⑫ TP3
REC

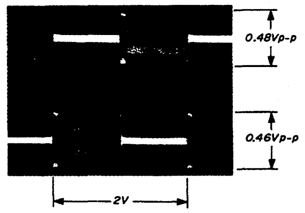


⑬ TP1
REC

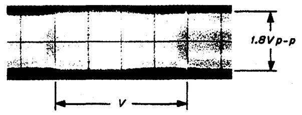


① TP25 PB

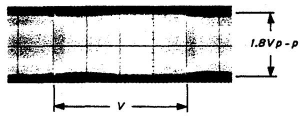
① TP23 PB



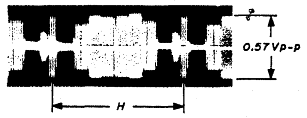
② TP24 PB



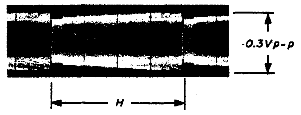
③ TP103 PB



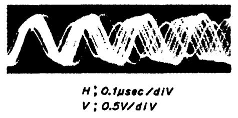
④ TP21 PB



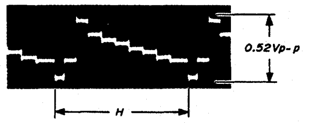
⑤ TP104 PB



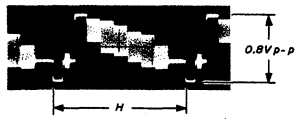
⑥ TP22 PB



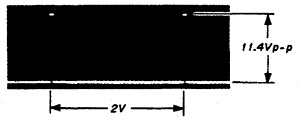
⑦ TP106, PB



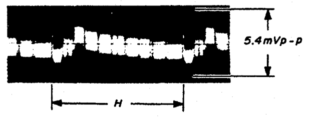
⑧ TP2 REC



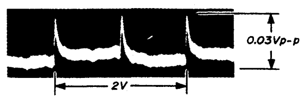
⑨ TP15 PB



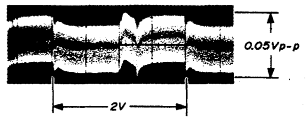
⑩ TP111 REC



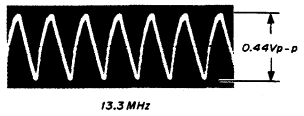
⑪ TP18 PB



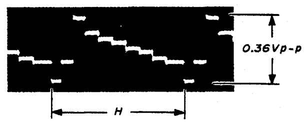
⑫ TP17 REC



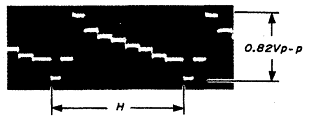
⑬ TP7 REC



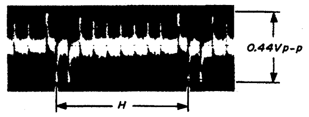
⑭ TP10 REC



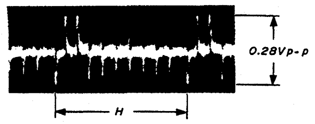
⑮ TP8 REC



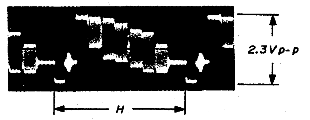
⑯ TP9 PB



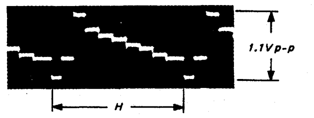
⑰ TP109 PB



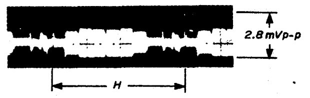
⑱ TP4 REC



⑲ TP11 REC



⑳ TP5 REC



VO-17: Y REC/PB (Y/C SEPARATOR)

EK;S/N 10001 thru 11100

VO-17 (1-622-395-11)

CN101	H-8
CN102	A-6
CN103	A-5
CN104	A-8
CN105	A-2
CN106	A-7
CN107	H-1
CN108	A-4
CN109	J-8
CN111	A-3
CN112	F-1
CN113	D-1
CN114	B-1
CN115	G-1
CN153	A-1
CN1002	J-1
CN1003	E-1
CN1004	D-1
CN1005	E-1
CN1006	F-1
CN1007	G-1
CN1009	C-1
CP1	G-7
CV1	J-1
D4	D-4
D7	E-4
D19	C-8
D20	C-8
D27	G-8
D28	G-8
D29	E-4
D101	H-1
D120	A-1
D130	H-4
D131	A-8
D132	A-8
D133	A-8
D134	A-8
D135	A-1
D200	D-5
DL1	D-2
DL2	E-6
DL3	F-6
DL4	G-2
DL5	H-2
DL6	B-5
E1	A-4
E2	A-8
E3	F-7
E4	F-4
E5	J-8
E6	J-4
E7	G-5
FL1	B-2
FL2	B-2
FL4	B-3
FL5	D-1
FL6	D-6
FL7	J-4
FL8	J-5
FL9	J-6
FL10	J-2
FL12	A-2
FL14	A-4
IC1	B-1
IC2	C-2
IC3	A-4
IC4	A-5
IC5	D-2
IC6	D-3
IC7	E-4
IC8	E-3
IC10	B-7
IC12	B-5
IC13	C-6
IC14	C-6
IC15	D-7
IC16	F-5
IC17	F-5
IC18	E-6
IC19	F-7
IC20	G-1
IC21	G-3
IC22	H-1
IC23	H-2
IC24	J-1
IC25	G-5
IC26	G-6
IC27	H-6
IC28	G-7
IC29	G-8
IC30	J-4
IC31	J-7
IC32	J-5
IC34	G-8
IC36	A-2
IC37	A-6
IC38	B-8
LV1	G-6
LV2	J-3
RV2	B-3
RV3	A-3
RV4	A-5
RV6	B-4
RV8	B-3
RV9	C-5
RV10	B-5
RV11	C-5
RV14	D-4
RV15	D-5
RV16	E-5
RV17	E-5
RV20	B-7
RV21	D-6
RV22	C-8
RV23	C-7
RV24	E-6
RV25	E-6
RV26	G-2
RV27	G-2
RV28	H-2
RV29	H-3
RV30	H-4
RV31	J-3
RV34	H-4
RV35	H-7
RV36	J-4
RV37	J-4
RV38	J-6
RV39	J-6
RV40	J-7
RV41	J-7
RV103	B-4
RV104	C-4
RV105	E-6
RV106	H-7
RV107	A-3
RV108	A-8
RV109	A-7
RV110	C-3
S1	F-2
TP1	A-2
TP2	J-1
TP3	C-4
TP4	A-7
TP5	A-7
TP7	C-6
TP8	C-7
TP9	C-8
TP10	D-7
TP11	F-8
TP12	G-2
TP13	G-3
TP14	G-4
TP15	G-5
TP16	J-1
TP17	G-5
TP18	G-6
TP19	H-2
TP20	H-3
TP21	J-3
TP22	J-6
TP23	J-6
TP24	J-8
TP25	J-8
TP100	C-2
TP101	E-2
TP102	H-4
TP103	J-4
TP104	F-6
TP105	E-7
TP106	B-5
TP107	H-1
TP108	D-4
TP109	B-8
TP111	A-7

B-3
A-3
A-5
B-4
B-3
C-5
B-5
C-5
D-4
D-5
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B-7
D-6
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H-4
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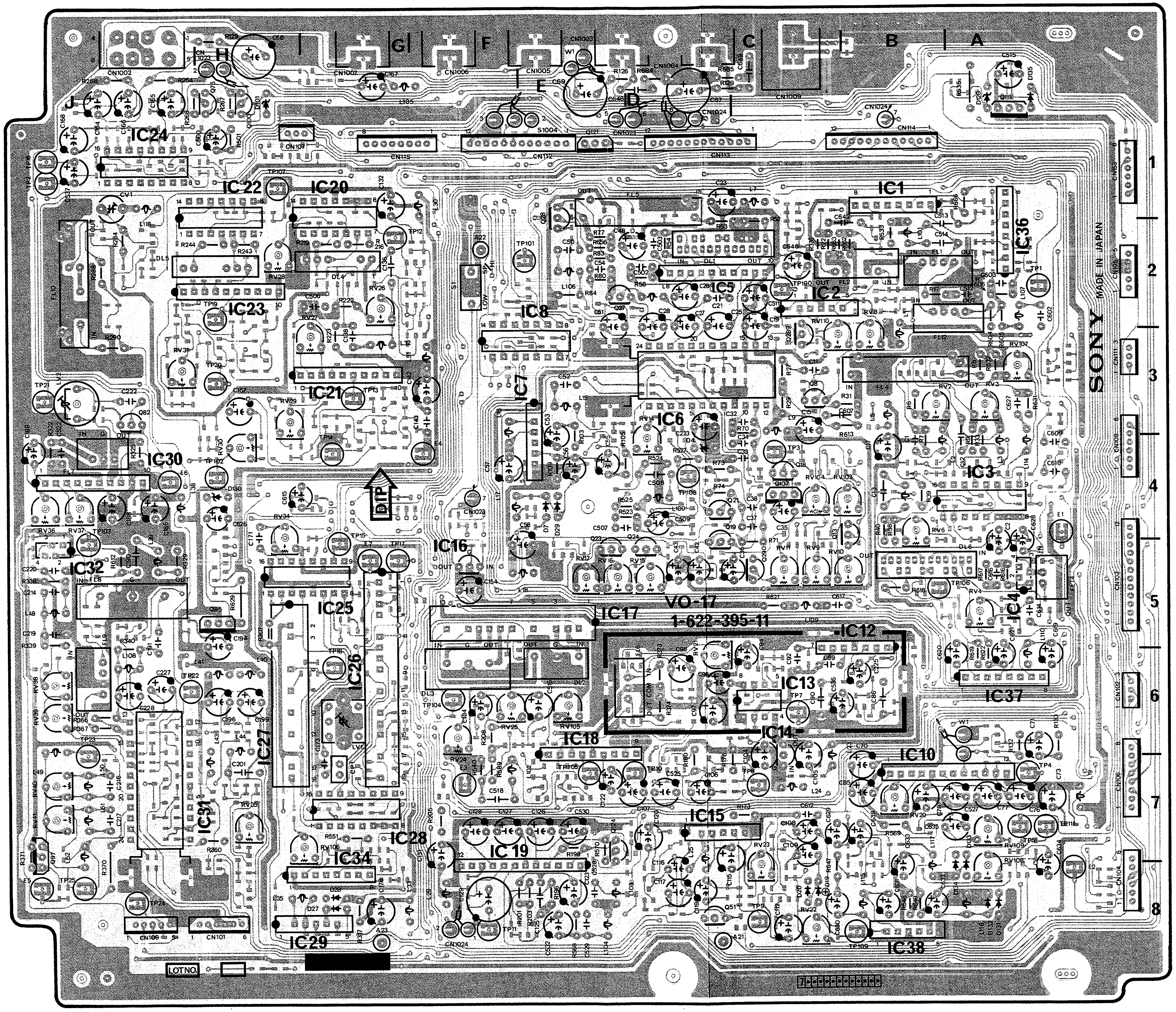
H-4
H-7
J-4
J-4
J-6
J-6
J-7
J-7
3 B-4
4 C-4
5 E-6
6 H-7
7 A-3
3 A-8
9 A-7
0 C-3

F-2

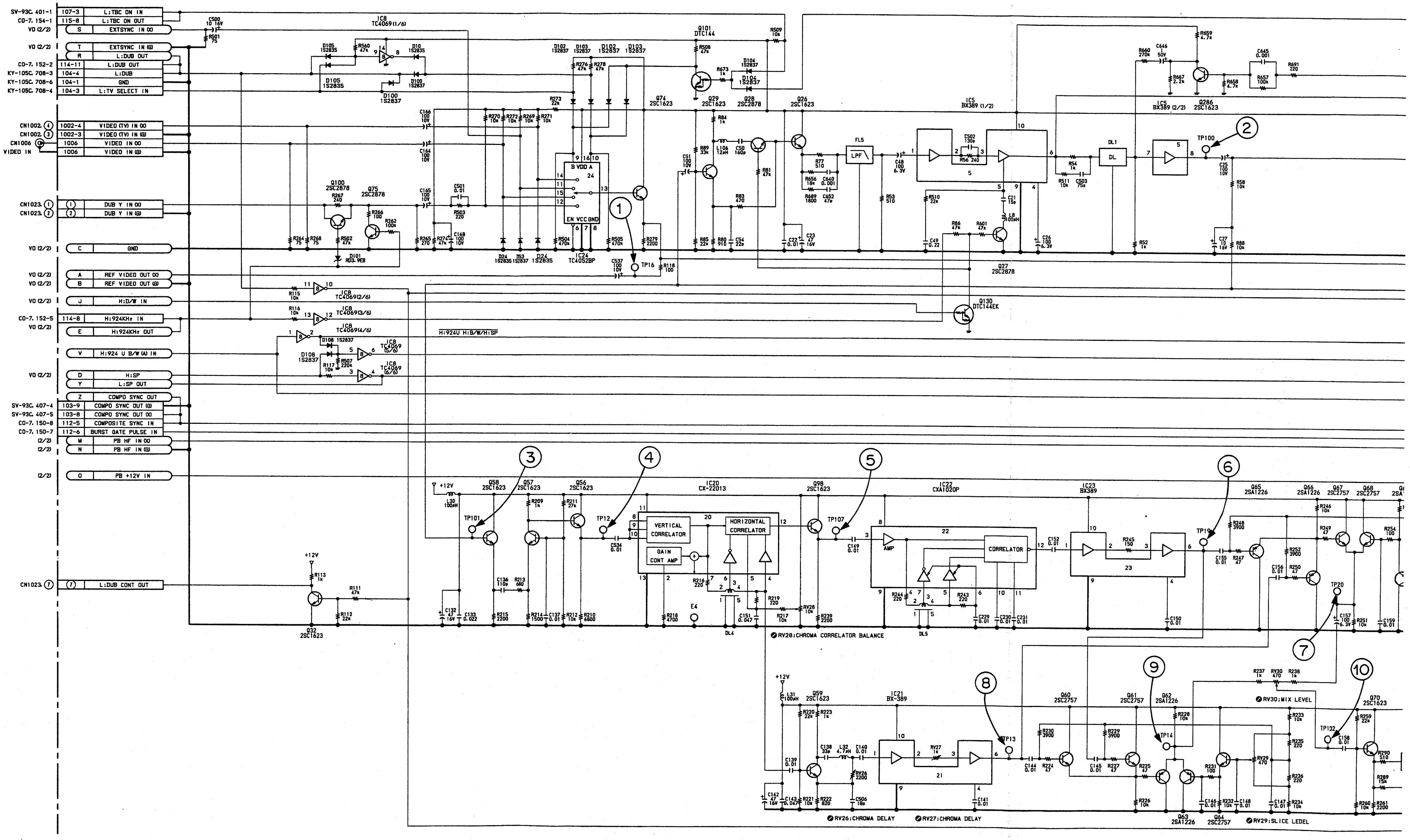
A-2
J-1
C-4
A-7
A-7
C-6
C-7
C-8
D-7
F-8
G-2

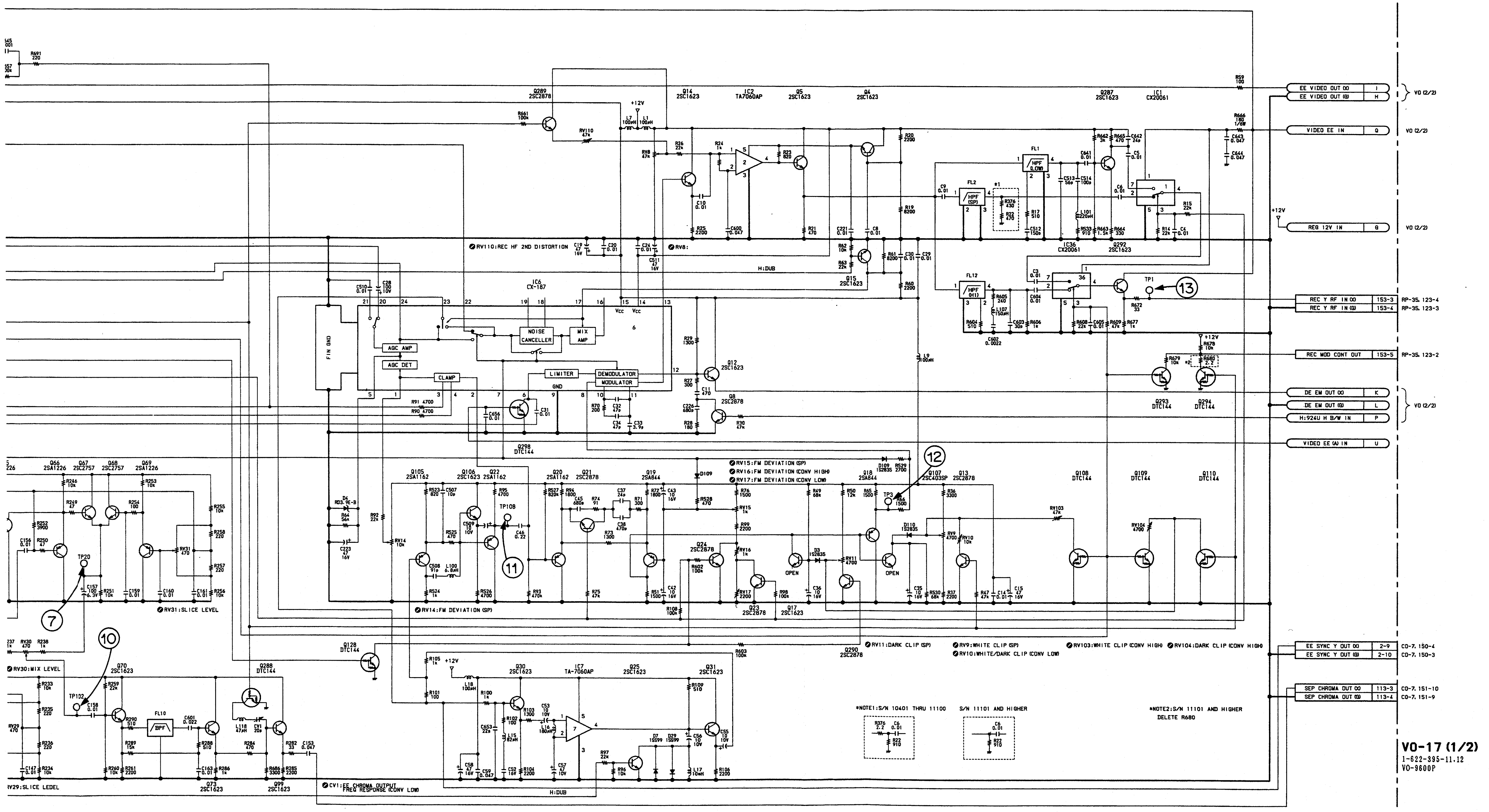
TP13	G-3
TP14	G-4
TP15	G-5
TP16	J-1
TP17	G-5
TP18	G-6
TP19	H-2
TP20	H-3
TP21	J-3
TP22	J-6
TP23	J-6
TP24	J-8
TP25	J-8
TP100	C-2
TP101	E-2
TP102	H-4
TP103	J-4
TP104	F-6
TP105	E-7
TP106	B-5
TP107	H-1
TP108	D-4
TP109	B-8
TP111	A-7


J
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
IC10
IC12
IC13
IC14
IC15
IC16
IC17
IC18
IC19
IC20
IC21
IC22
IC23
IC24
IC25
IC26
IC27
IC28
IC29
IC30
IC31
IC32
IC34
IC36
IC37
IC38
CN1002
CN1007
CN1006
CN1005
CN1003
CN1001
CN1009
CN1024
CN107
CN115
CN112
CN113
CN114
CN109
CN101
S1004
DIP
SONY
MADE IN JAPAN
VO-17
1-622-395-11
LOT NO.

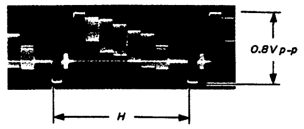
VO-17
-COMPONENT SIDE-
1-622-395-11
VO-9600P

VO-17(1/2): Y REC/PB (Y/C SEPARATOR)
EK;S/N 10001 and higher

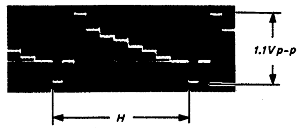

L:TBC ON IN
L:TBC ON OUT
EXTSYNC IN (X)
EXTSYNC IN (B)
L:DUB OUT
L:DUB
GND
L:TV SELECT IN
VIDEO (TV) IN (X)
VIDEO (TV) IN (B)
VIDEO IN (X)
VIDEO IN (B)
VIDEO IN
DUB Y IN (X)
DUB Y IN (B)
GND
REF VIDEO OUT (X)
REF VIDEO OUT (B)
H:D/W IN
H:924KHz IN
H:924KHz OUT
H:924 U B/W (A) IN
H:SP
L:SP OUT
COMPO SYNC OUT
COMPO SYNC OUT (X)
COMPO SYNC OUT (B)
COMPOSITE SYNC IN
BURST GATE PULSE IN
PB HF IN (X)
PB HF IN (B)
PB +12V IN
L:DUB CONT OUT
IC8 TC4069
IC24 TC4052BP
IC5 BX389
FL5 LPF
DL1
TP100
TP16
TP101
TP12
TP107
TP19
TP20
TP13
TP14
TP132
IC20 CX-22013
VERTICAL CORRELATOR
HORIZONTAL CORRELATOR
GAIN CONT AMP
IC22 CXA1020P
AMP
CORRELATOR
IC23 BX389
IC21 BX-389
DL4
DL5
RV28:CHROMA CORRELATOR BALANCE
RV26:CHROMA DELAY
RV27:CHROMA DELAY
RV30:MIX LEVEL
RV29:SLICE LEDEL
H:924U H:B/W/H:SP
+12V
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩


EE VIDEO OUT (X) I
EE VIDEO OUT (G) H
VO (2/2)
VIDEO EE IN Q
VO (2/2)
+12V
REG 12V IN G
VO (2/2)
REC Y RF IN (X) 153-3 RP-35, 123-4
REC Y RF IN (G) 153-4 RP-35, 123-3
REC MOD CONT OUT 153-5 RP-35, 123-2
DE EM OUT (X) K
DE EM OUT (G) L
H:924U H B/W IN P
VO (2/2)
VIDEO EE (A) IN U
EE SYNC Y OUT (X) 2-9 CO-7, 150-4
EE SYNC Y OUT (G) 2-10 CO-7, 150-3
SEP CHROMA OUT (X) 113-3 CO-7, 151-10
SEP CHROMA OUT (G) 113-4 CO-7, 151-9
VO-17 (1/2)
1-622-395-11,12
VO-9600P
IC1 CX20061
IC2 TA7060AP
IC6 CX-187
IC7 TA-7060AP
IC36 CX20061
FL1 HPF (LOW)
FL2 HPF (SP)
FL12 HPF (HI)
FL10 BPF
AGC AMP
AGC DET
CLAMP
NOISE CANCELLER
MIX AMP
LIMITER
DEMODULATOR
MODULATOR
FIN GND
Vcc
GND
H:DUB
TP1
TP3
TP20
TP108
TP132
⑦
⑩
⑪
⑫
⑬
RV110:REC HF 2ND DISTORTION
RV8:
RV15:FM DEVIATION (SP)
RV16:FM DEVIATION (CONV HIGH)
RV17:FM DEVIATION (CONV LOW)
RV14:FM DEVIATION (SP)
RV31:SLICE LEVEL
RV30:MIX LEVEL
RV29:SLICE LEDEL
CV1:EE CHROMA OUTPUT FREQ RESPONSE (CONV LOW)
RV11:DARK CLIP (SP)
RV9:WHITE CLIP (SP)
RV10:WHITE/DARK CLIP (CONV LOW)
RV103:WHITE CLIP (CONV HIGH)
RV104:DARK CLIP (CONV HIGH)
OPEN
*NOTE1:S/N 10401 THRU 11100
R376 2.2
C6 0.01
R22 910
S/N 11101 AND HIGHER
C6 0.01
R22 910
*NOTE2:S/N 11101 AND HIGHER
DELETE R680
Q289 2SC2878
Q14 2SC1623
Q5 2SC1623
Q4 2SC1623
Q287 2SC1623
Q292 2SC1623
Q15 2SC1623
Q12 2SC1623
Q8 2SC2878
Q293 DTC144
Q294 DTC144
Q298 DTC144
Q66 2SA1226
Q67 2SC2757
Q68 2SC2757
Q69 2SA1226
Q105 2SA1162
Q106 2SC1623
Q22 2SA1162
Q20 2SA1162
Q21 2SC2878
Q19 2SA844
Q18 2SA844
Q107 2SC403SP
Q13 2SC2878
Q108 DTC144
Q109 DTC144
Q110 DTC144
Q24 2SC2878
Q23 2SC2878
Q17 2SC1623
Q290 2SC2878
Q128 DTC144
Q288 DTC144
Q70 2SC1623
Q73 2SC1623
Q99 2SC1623
Q30 2SC1623
Q25 2SC1623
Q31 2SC1623
D109 1S2835
D110 1S2835
D3 1S2835
D4 RD3.9E-B
D7 1SS99
D29 1SS99

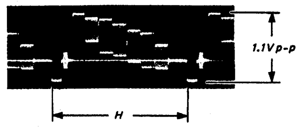
① TP16
REC



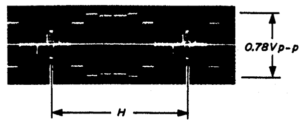
② TP100
REC



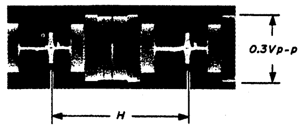
③ TP101
REC



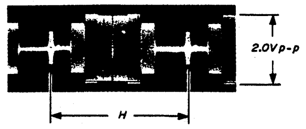
④ TP12
REC



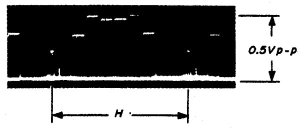
⑤ TP107
REC



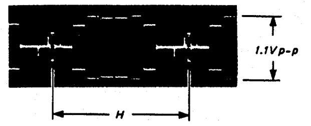
⑥ TP19
REC



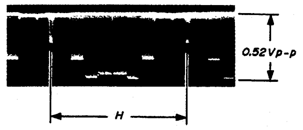
⑦ TP20
REC



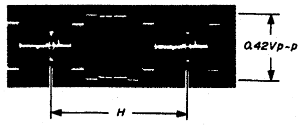
⑧ TP13
REC



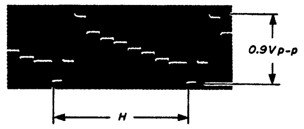
⑨ TP14
REC



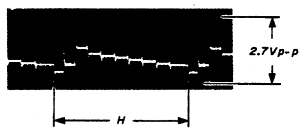
⑩ TP102
REC



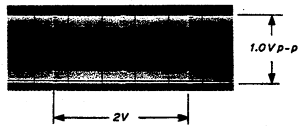
⑪ TP108
REC



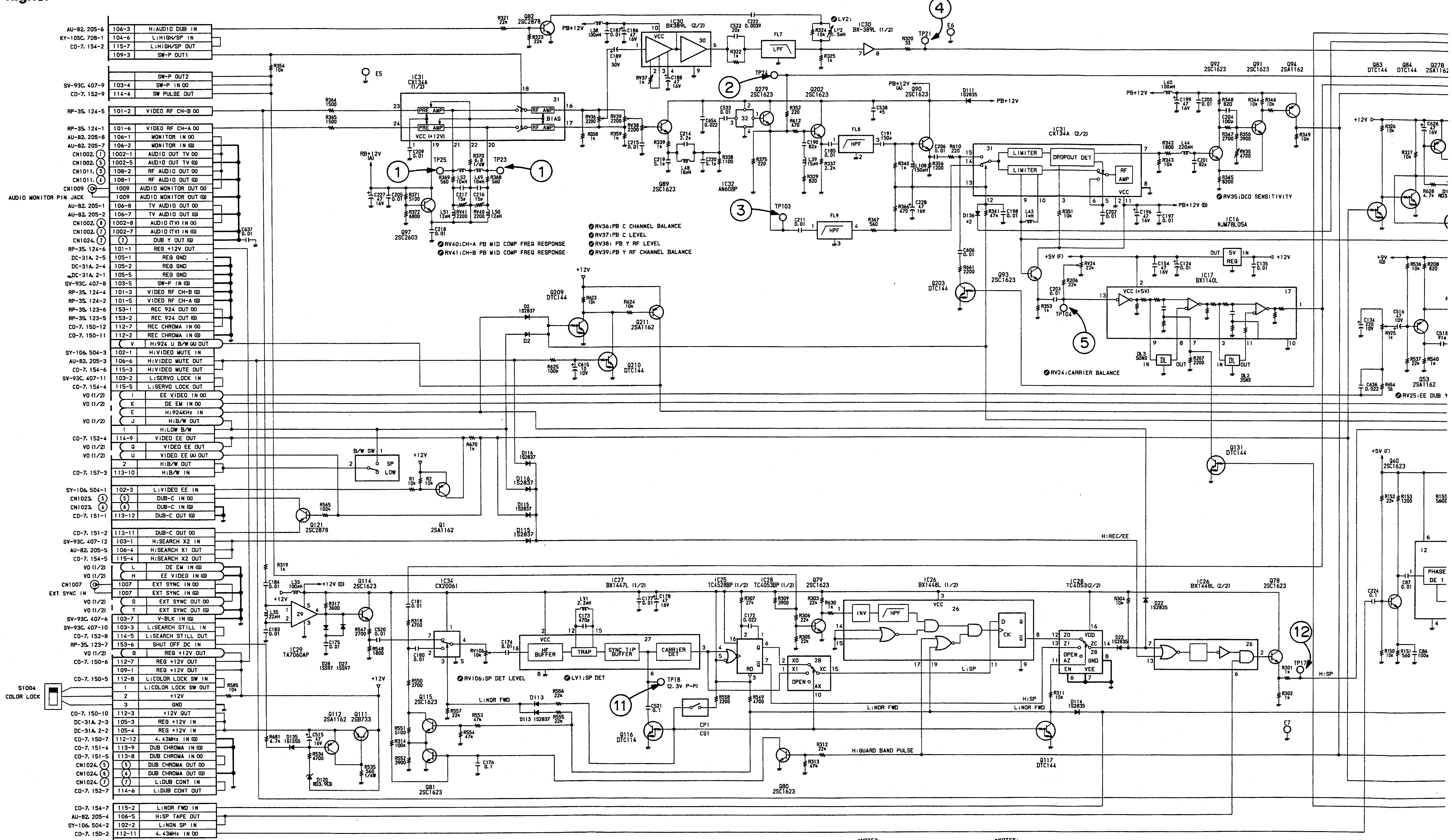
⑫ TP3
REC



⑬ TP1
REC



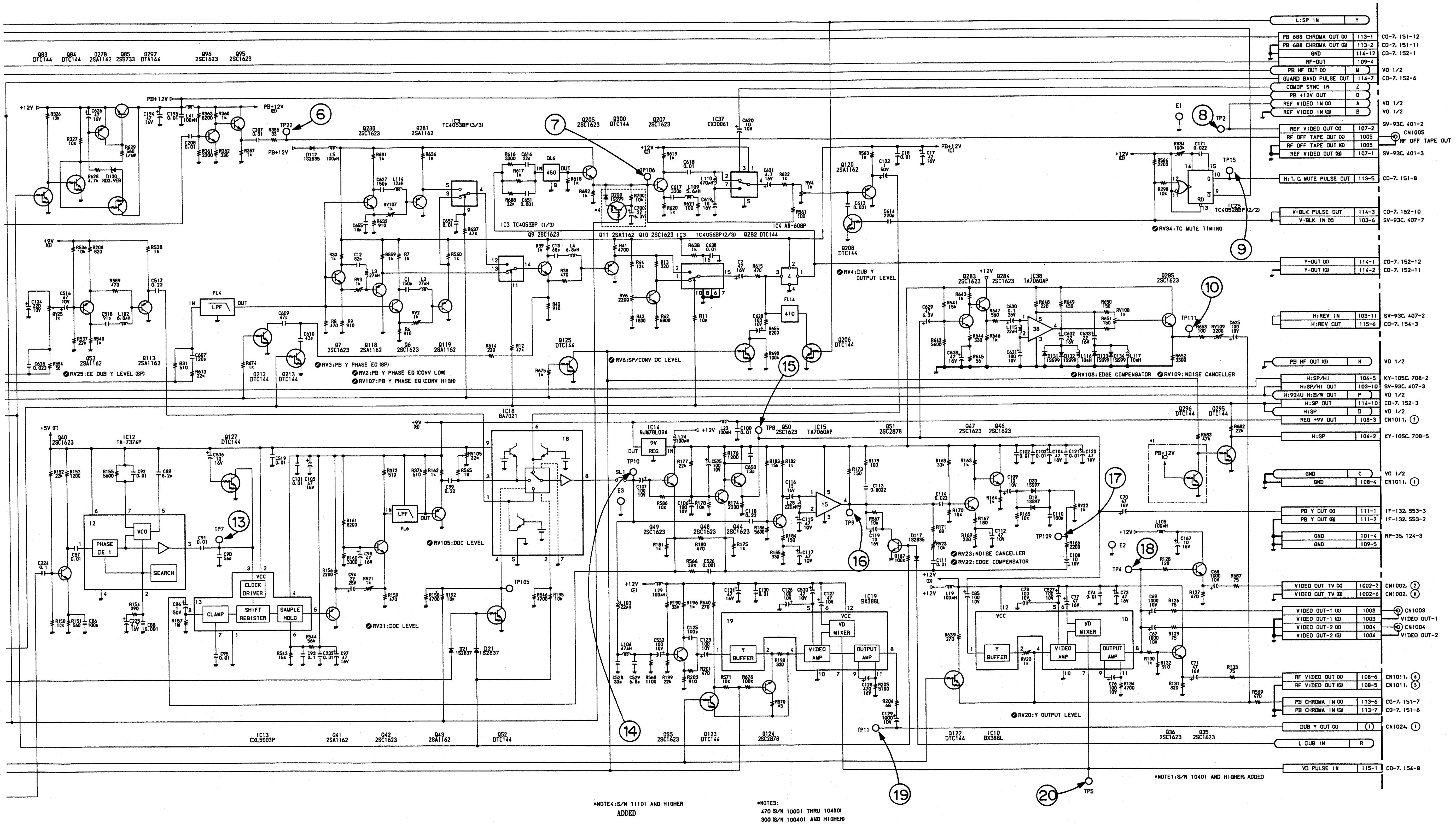
VO-17(2/2): Y REC/PB (Y/C SEPARATOR)
EK;S/N 10001 and higher


IC30 BX389L (2/2)
IC30 BX-389L (1/2)
IC31 CX134A (1/2)
IC31 CX134A (2/2)
IC32 AN608P
IC16 NJM78L05A
IC17 BX1140L
IC29 TA7060AP
IC34 CX20061
IC27 BX1447L (1/2)
IC25 TC4528BP (1/2)
IC28 TC4053BP (1/2)
IC26 BX1448L (1/2)
IC28 TC4053(2/2)
IC26 BX1448L (2/2)
PRE AMP
RF AMP
BIAS
VCC
LPF
HPF
LIMITER
DROPOUT DET
HF BUFFER
TRAP
SYNC TIP BUFFER
CARRIER DET
INV
PHASE DET
DL
S1004 COLOR LOCK
AUDIO MONITOR PIN JACK
CN1007 EXT SYNC IN
B/W SW
SP
LOW
H:REC/EE
H:SP
L:NOR FWD
H:GUARD BAND PULSE
TP17
TP18 (2.3V P-P)
TP21
TP23
TP24
TP25
TP103
TP104
E5
E6
E7
①
②
③
④
⑤
⑪
⑫
RV40:CH-A PB MID COMP FREQ RESPONSE
RV41:CH-B PB MID COMP FREQ RESPONSE
RV36:PB C CHANNEL BALANCE
RV37:PB C LEVEL
RV38: PB Y RF LEVEL
RV39:PB Y RF CHANNEL BALANCE
RV35:DCO SENSITIVITY
RV24:CARRIER BALANCE
RV106:SP DET LEVEL
LV1:SP DET
RV25:EE DUB Y

*NOTE2:
1SS119 (S/N 10001 THRU 11100)
1S2837 (S/N 11101 AND HIGHER)

*NOTE5:
0.01 (S/N 10001 THRU 11100)
0.047 (S/N 11101 AND HIGHER)

VO-17(2/2)


L:SP IN | Y
PB 688 CHROMA OUT (X) | 113-1 | CO-7, 151-12
PB 688 CHROMA OUT (G) | 113-2 | CO-7, 151-11
GND | 114-12 | CO-7, 152-1
RF-OUT | 109-4
PB HF OUT (X) | M | VO 1/2
GUARD BAND PULSE OUT | 114-7 | CO-7, 152-6
COMOP SYNC IN | Z
PB +12V OUT | O
REF VIDEO IN (X) | A | VO 1/2
REF VIDEO IN (G) | B | VO 1/2
REF VIDEO OUT (X) | 107-2 | SV-93C, 401-2
RF OFF TAPE OUT (X) | 1005 | CN1005 RF OFF TAPE OUT
RF OFF TAPE OUT (G) | 1005
REF VIDEO OUT (G) | 107-1 | SV-93C, 401-3
H:T.C.MUTE PULSE OUT | 113-5 | CO-7, 151-8
V-BLK PULSE OUT | 114-3 | CO-7, 152-10
V-BLK IN (X) | 103-6 | SV-93C, 407-7
Y-OUT (X) | 114-1 | CO-7, 152-12
Y-OUT (G) | 114-2 | CO-7, 152-11
H:REV IN | 103-11 | SV-93C, 407-2
H:REV OUT | 115-6 | CO-7, 154-3
PB HF OUT (G) | N | VO 1/2
H:SP/HI | 104-5 | KY-105C, 708-2
H:SP/HI OUT | 103-10 | SV-93C, 407-3
H:924U H:B/W OUT | P | VO 1/2
H:SP OUT | 114-10 | CO-7, 152-3
H:SP | D | VO 1/2
REG +9V OUT | 108-3 | CN1011, ②
H:SP | 104-2 | KY-105C, 708-5
GND | C | VO 1/2
GND | 108-4 | CN1011, ①
PB Y OUT (X) | 111-1 | IF-132, 553-3
PB Y OUT (G) | 111-2 | IF-132, 553-2
GND | 101-4 | RP-35, 124-3
GND | 109-5
VIDEO OUT TV (X) | 1002-2 | CN1002, ②
VIDEO OUT TV (G) | 1002-6 | CN1002, ⑥
VIDEO OUT-1 (X) | 1003 | CN1003
VIDEO OUT-1 (G) | 1003 | VIDEO OUT-1
VIDEO OUT-2 (X) | 1004 | CN1004
VIDEO OUT-2 (G) | 1004 | VIDEO OUT-2
RF VIDEO OUT (X) | 108-6 | CN1011, ⑥
RF VIDEO OUT (G) | 108-5 | CN1011, ⑤
PB CHROMA IN (X) | 113-6 | CO-7, 151-7
PB CHROMA IN (G) | 113-7 | CO-7, 151-6
DUB Y OUT (X) | ① | CN1024, ①
L DUB IN | R
VD PULSE IN | 115-1 | CO-7, 154-8
⑥ ⑦ ⑧ ⑨ ⑩ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳
TP22 TP106 TP2 TP15 TP111 TP7 TP105 TP10 TP8 TP9 TP109 TP4 TP11 TP5 E1 E2 E3 SL1
IC3 TC4053BP (3/3)
IC3 TC4053BP (1/3)
IC3 TC4066BP (2/3)
IC37 CX20061
IC4 AN-608P
IC25 TC4052BP (2/2)
IC38 TA7060AP
IC18 BA7021
IC14 NJM78L09A
IC15 TA7060AP
IC12 TA-7374P
IC13 CXL5003P
IC19 BX388L
IC10 BX388L
PHASE DET
VCO
SEARCH
CLOCK DRIVER
CLAMP
SHIFT REGISTER
SAMPLE HOLD
LPF
FL4
FL6
FL14
DL6
9V REG
Y BUFFER
VIDEO AMP
OUTPUT AMP
VD MIXER
RV25:EE DUB Y LEVEL (SP)
RV3:PB Y PHASE EQ (SP)
RV2:PB Y PHASE EQ (CONV LOW)
RV107:PB Y PHASE EQ (CONV HIGH)
RV6:SP/CONV DC LEVEL
RV4:DUB Y OUTPUT LEVEL
RV34:TC MUTE TIMING
RV108:EDGE COMPENSATOR
RV109:NOISE CANCELLER
RV105:DOC LEVEL
RV21:DOC LEVEL
RV23:NOISE CANCELLER
RV22:EDGE COMPENSATOR
RV20:Y OUTPUT LEVEL
+12V
PB+12V
+9V
+5V (F)

*NOTE4:S/N 11101 AND HIGHER
ADDED

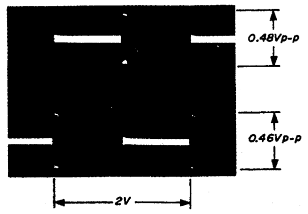
*NOTE3:
470 (S/N 10001 THRU 10400)
300 (S/N 100401 AND HIGHER)

*NOTE1:S/N 10401 AND HIGHER ADDED

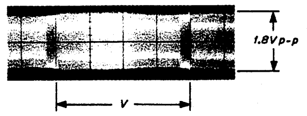
VO-17 (2/2)
1-622-395-11.12
VO-9600P

① TP25
PB

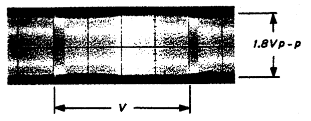
① TP23
PB



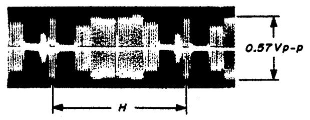
② TP24
PB



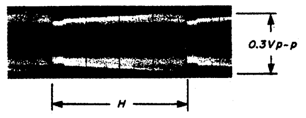
③ TP103
PB



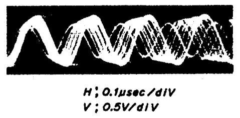
④ TP21
PB



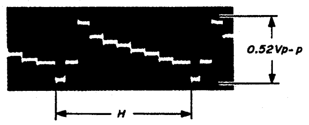
⑤ TP104
PB



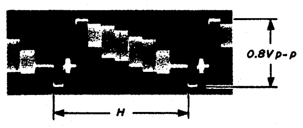
⑥ TP22
PB



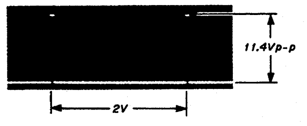
⑦ TP106
PB



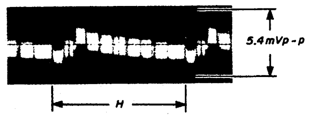
⑧ TP2
REC



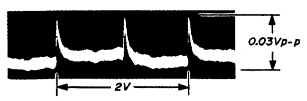
⑨ TP15
PB



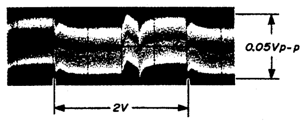
⑩ TP111
REC



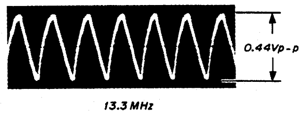
⑪ TP18
PB



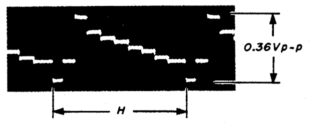
⑫ TP17
REC



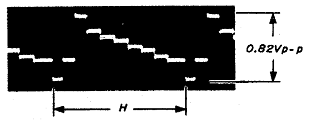
⑬ TP7
REC



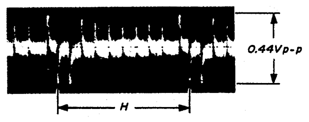
⑭ TP10
REC



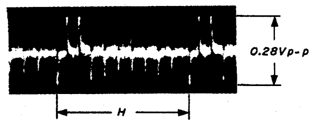
⑮ TP8
REC



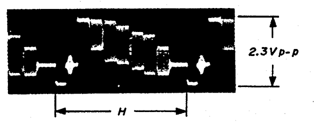
⑯ TP9
PB



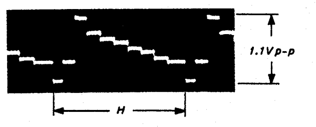
⑰ TP109
PB



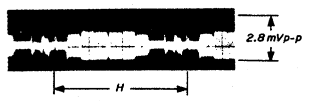
⑱ TP4
REC



⑲ TP11
REC



⑳ TP5
REC



VO-17: Y REC/PB (Y/C SEPARATOR)
EK;S/N 11101 and higher

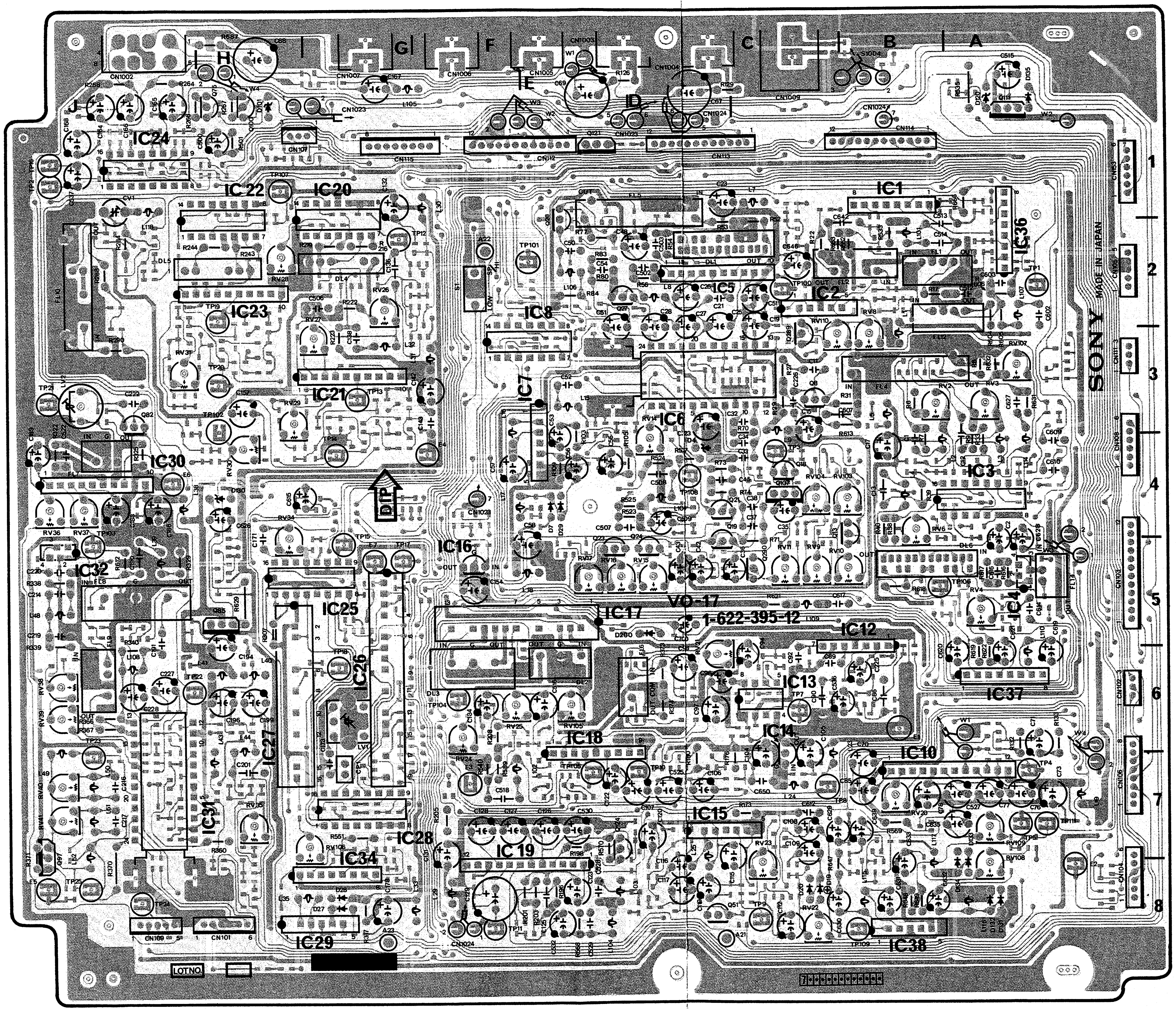
VO-17 (1-622-395-12)

CN101	H-8
CN102	A-6
CN103	A-5
CN104	A-8
CN105	A-2
CN106	A-7
CN107	H-1
CN108	A-4
CN109	J-8
CN111	A-3
CN112	F-1
CN113	D-1
CN114	B-1
CN115	G-1
CN153	A-1
CN1002	J-1
CN1003	E-1
CN1004	D-1
CN1005	E-1
CN1006	F-1
CN1007	G-1
CN1009	C-1
CP1	G-7
CV1	J-1
D4	D-4
D7	E-4
D19	C-8
D20	C-8
D27	G-8
D28	G-8
D29	E-4
D101	H-1
D120	A-1
D130	H-4
D131	A-8
D132	A-8
D133	A-8
D134	A-8
D135	A-1
D200	D-5
DL1	D-2
DL2	E-6
DL3	F-6
DL4	G-2
DL5	H-2
DL6	B-5
E1	B-6
E2	A-8
E3	F-7
E4	F-4
E5	J-8
E6	J-4
E7	G-5
FL1	B-2
FL2	B-2
FL4	B-3
FL5	D-1
FL6	D-6
FL7	J-4
FL8	J-5
FL9	J-6
FL10	J-2
FL12	A-2
FL14	A-4
IC1	B-1
IC2	C-2
IC3	A-4
IC4	A-5
IC5	D-2
IC6	D-3
IC7	E-4
IC8	E-3
IC10	B-7
IC12	B-5
IC13	C-6
IC14	C-6
IC15	D-7
IC16	F-5
IC17	F-5
IC18	E-6
IC19	F-7
IC20	G-1
IC21	G-3
IC22	H-1
IC23	H-2
IC24	J-1
IC25	G-5
IC26	G-6
IC27	H-6
IC28	G-7
IC29	G-8
IC30	J-4
IC31	J-7
IC32	J-5
IC34	G-8
IC36	A-2
IC37	A-6
IC38	B-8
LV1	G-6
LV2	J-3
Q8	C-3
Q13	B-4
Q18	C-4
Q19	D-5
Q21	D-4
Q23	E-5
Q24	D-5
Q27	E-2
Q28	E-1
Q51	D-8
Q75	H-1
Q82	J-3
Q85	H-5
Q97	J-7
Q100	H-1
Q107	C-4
Q111	A-1
Q121	E-1
Q124	E-7
Q289	C-3
Q290	C-5
RV2	B-3
RV3	A-3
RV4	A-5
RV6	B-4
RV8	B-3
RV9	C-5
RV10	B-5
RV11	C-5
RV14	D-4
RV15	D-5
RV16	E-5
RV17	E-5
RV20	B-7
RV21	D-6
RV22	C-8
RV23	C-7
RV24	E-6
RV25	E-6
RV26	G-2
RV27	G-2
RV28	H-2
RV29	H-3
RV30	H-4
RV31	J-3
RV34	H-4
RV35	H-7
RV36	J-4
RV37	J-4
RV38	J-6
RV39	J-6
RV40	J-7
RV41	J-7
RV103	B-4
RV104	C-4
RV105	E-6
RV106	H-7
RV107	A-3
RV108	A-8
RV109	A-7
RV110	C-3
S1	F-2
TP1	A-2
TP2	J-1
TP3	C-4
TP4	A-7
TP5	A-7
TP7	C-6
TP8	C-7
TP9	C-8
TP10	D-7
TP11	F-8
TP12	G-2
TP13	G-3
TP14	G-4
TP15	G-5
TP16	J-1
TP17	G-5
TP18	G-6
TP19	H-2
TP20	H-3
TP21	J-3
TP22	J-6
TP23	J-6
TP24	J-8
TP25	J-8
TP100	C-2
TP101	E-2
TP102	H-3
TP103	J-4
TP104	F-6
TP105	E-7
TP106	B-5
TP107	H-1
TP108	D-4
TP109	B-8
TP111	A-7

C-3
B-4
C-4
D-5
D-4
E-5
D-5
E-2
E-1
D-8
H-1
J-3
H-5
J-7
H-1
C-4
A-1
E-1
E-7
C-3
C-5

B-3
A-3
A-5
B-4
B-3
C-5
B-5
C-5
D-4
D-5
E-5
E-5
B-7
D-6
C-8
C-7
E-6
E-6
G-2
G-2
H-2
H-3
H-4
J-3
H-4
H-7
J-4
J-4
J-6
J-6
J-7
J-7
3 B-4
4 C-4
5 E-6

RV106	H-7
RV107	A-3
RV108	A-8
RV109	A-7
RV110	C-3
S1	F-2
TP1	A-2
TP2	J-1
TP3	C-4
TP4	A-7
TP5	A-7
TP7	C-6
TP8	C-7
TP9	C-8
TP10	D-7
TP11	F-8
TP12	G-2
TP13	G-3
TP14	G-4
TP15	G-5
TP16	J-1
TP17	G-5
TP18	G-6
TP19	H-2
TP20	H-3
TP21	J-3
TP22	J-6
TP23	J-6
TP24	J-8
TP25	J-8
TP100	C-2
TP101	E-2
TP102	H-3
TP103	J-4
TP104	F-6
TP105	E-7
TP106	B-5
TP107	H-1
TP108	D-4
TP109	B-8
TP111	A-7

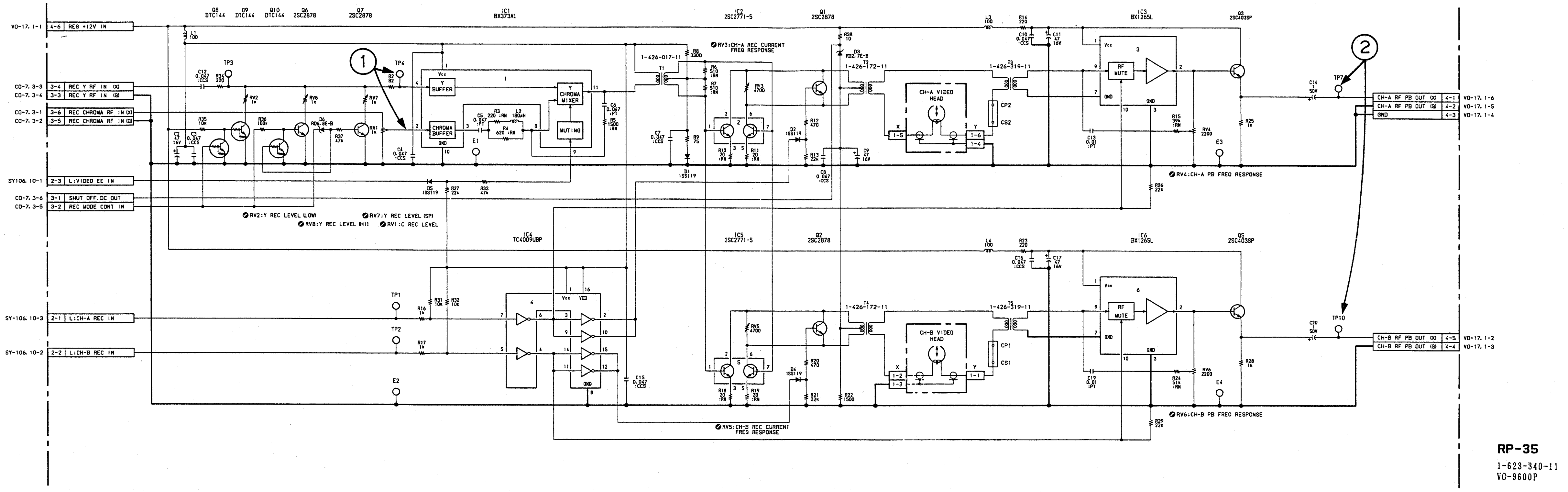

J
H
I
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
IC10
IC12
IC13
IC14
IC15
IC16
IC17
IC18
IC19
IC20
IC21
IC22
IC23
IC24
IC25
IC26
IC27
IC28
IC29
IC30
IC31
IC32
IC34
IC36
IC37
IC38
DIP
SONY
MADE IN JAPAN
VO-17
1-622-395-12
LOT NO.

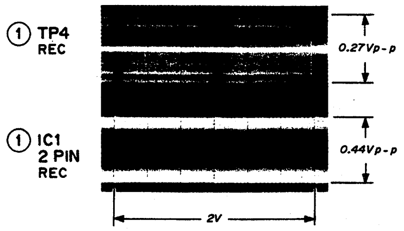
VO-17

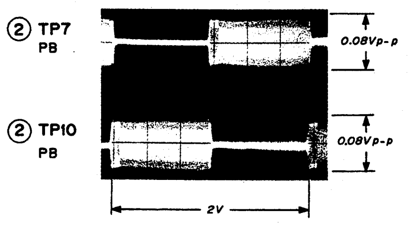
-COMPONENT SIDE-

1-622-395-12
VO-9600P

RP-35:PB AMPLIFIER


VO-17. 1-1
4-6
REG +12V IN
CO-7. 3-3
3-4
REC Y RF IN (X)
CO-7. 3-4
3-3
REC Y RF IN (G)
CO-7. 3-1
3-6
REC CHROMA RF IN (X)
CO-7. 3-2
3-5
REC CHROMA RF IN (G)
SY106. 10-1
2-3
L:VIDEO EE IN
CO-7. 3-6
3-1
SHUT OFF.DC OUT
CO-7. 3-5
3-2
REC MODE CONT IN
SY-106. 10-3
2-1
L:CH-A REC IN
SY-106. 10-2
2-2
L:CH-B REC IN
Q8 DTC144
Q9 DTC144
Q10 DTC144
Q6 2SC2878
Q7 2SC2878
IC1 BX373AL
IC2 2SC2771-5
Q1 2SC2878
IC3 BX1265L
Q3 2SC403SP
IC4 TC4009UBP
IC5 2SC2771-5
Q2 2SC2878
IC6 BX1265L
Q5 2SC403SP
L1 100
TP3
C12 0.047 :CCS
R34 220
RV2 1k
RV8 1k
RV7 1k
R35 10k
R36 100k
D6 RD6.8E-B
R37 47k
RV1 1k
C2 47 16V
C3 0.047 :CCS
C4 0.047 :CCS
①
TP4
R2 82
Vcc
Y BUFFER
CHROMA BUFFER
GND
E1
C5 0.047 :PT
R3 220 :RN
L2 180μH
R4 620 :RN
Y CHROMA MIXER
MUTING
C6 0.047 :PT
R5 1500 :RN
D5 1SS119
R27 22k
R33 47k
RV2:Y REC LEVEL (LOW)
RV8:Y REC LEVEL (HI)
RV7:Y REC LEVEL (SP)
RV1:C REC LEVEL
1-426-017-11
T1
R8 3300
RV3:CH-A REC CURRENT FREQ RESPONSE
R6 510 :RN
R7 510 :RN
RV3 4700
C7 0.047 :CCS
R9 75
D1 1SS119
R10 20 :RN
R11 20 :RN
R38 10
D3 RD2.7E-B
T2 1-426-172-11
R12 470
D2 1SS119
R13 22k
C8 0.047 :CCS
C9 47 16V
CH-A VIDEO HEAD
X
1-5
Y
1-6
1-4
CP2
CS2
L3 100
R14 220
C10 0.047 :CCS
C11 47 16V
T3 1-426-319-11
RF MUTE
C13 0.01 :PT
R15 39k :RN
RV4 2200
E3
R25 1k
R26 22k
RV4:CH-A PB FREQ RESPONSE
②
TP7
C14 1 50V
CH-A RF PB OUT (X)
4-1
VO-17. 1-6
CH-A RF PB OUT (G)
4-2
VO-17. 1-5
GND
4-3
VO-17. 1-4
TP1
TP2
R16 1k
R17 1k
R31 10k
R32 10k
E2
Vcc
VDD
C15 0.047 :CCS
RV5 4700
R18 20 :RN
R19 20 :RN
D4 1SS119
R20 470
R21 22k
R22 1500
RV5:CH-B REC CURRENT FREQ RESPONSE
T4 1-426-172-11
CH-B VIDEO HEAD
1-2
1-3
1-1
CP1
CS1
L4 100
R23 220
C16 0.047 :CCS
C17 47 16V
T5 1-426-319-11
C19 0.01 :PT
R24 51k :RN
RV6 2200
E4
R28 1k
R29 22k
RV6:CH-B PB FREQ RESPONSE
TP10
C20 1 50V
CH-B RF PB OUT (X)
4-5
VO-17. 1-2
CH-B RF PB OUT (G)
4-4
VO-17. 1-3
RP-35
1-623-340-11
VO-9600P

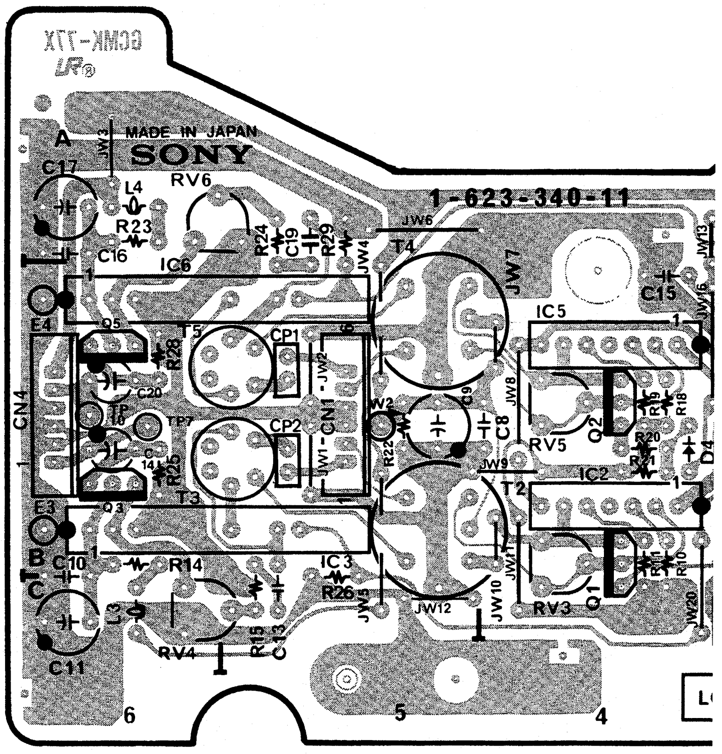




RP-35:PB AMPLIFIER

RP-35 (1-623-340-11)

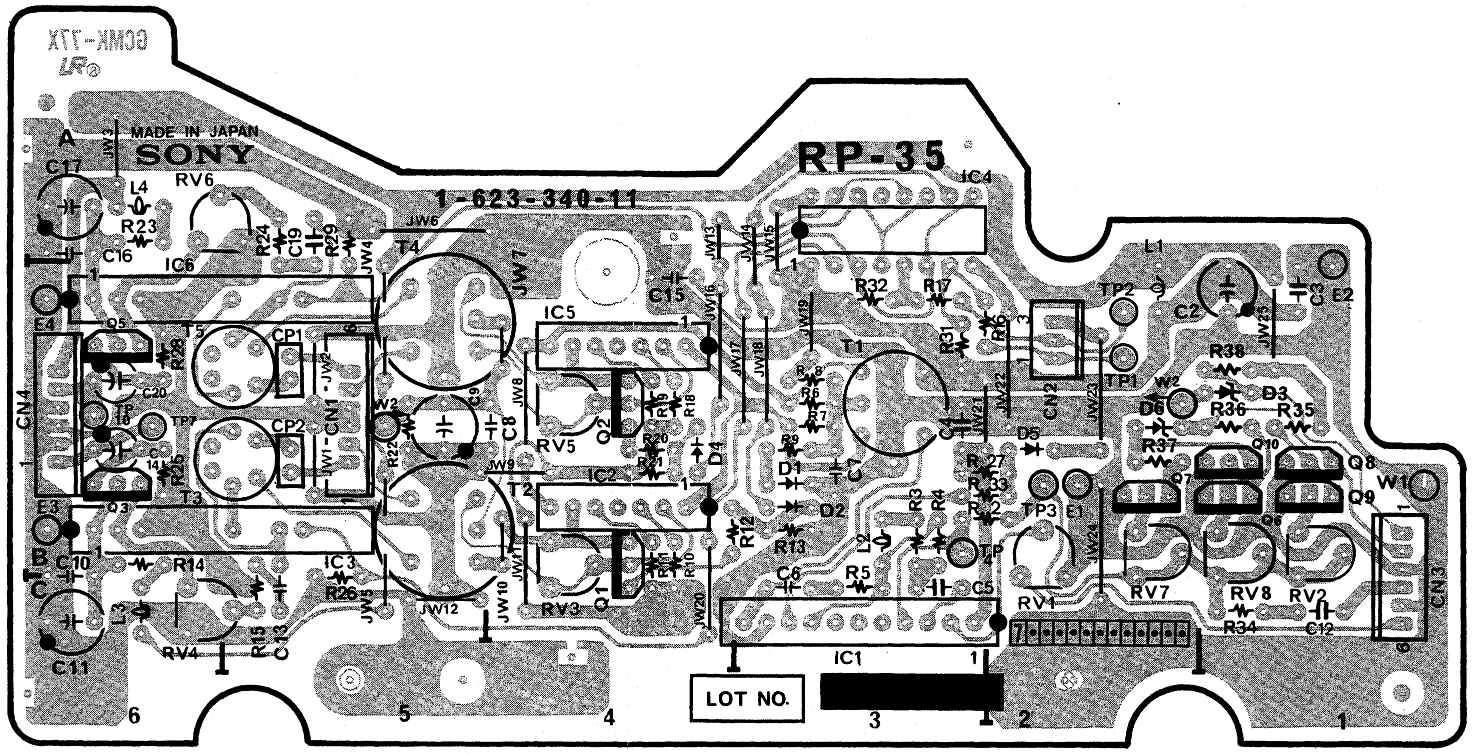
CN1	B-5	T1	B-3
CN2	B-2	T2	B-5
CN3	B-1	T3	B-5
CN4	B-6	T4	B-5
		T5	B-5
CP1	B-5		
CP2	B-5	TP1	B-2
		TP2	B-2
D1	B-3	TP3	B-2
D2	B-3	TP4	B-3
D3	B-1	TP7	B-6
D4	B-4	TP10	B-6
D5	B-2		
D6	B-2	W1	B-1
E1	B-2		
E2	A-1		
E3	B-6		
E4	B-6		
IC1	C-3		
IC2	B-4		
IC3	B-6		
IC4	A-3		
IC5	B-4		
IC6	B-6		
Q1	B-4		
Q2	B-4		
Q3	B-6		
Q5	B-6		
Q6	B-2		
Q7	B-1		
Q8	B-1		
Q9	B-1		
Q10	B-1		
RV1	B-2		
RV2	B-1		
RV3	B-4		
RV4	C-6		
RV5	B-4		
RV6	A-6		
RV7	B-2		
RV8	B-1		


MADE IN JAPAN
SONY
1-623-340-11
A
B
C
C17
L4
RV6
R23
C16
IC6
R24
R29
JW4
JW6
T4
JW7
IC5
C15
E4
Q5
T5
CP1
CN4
C20
TP7
CP2
W2
C8
JW8
Q2
RV5
R20
R21
R18
D4
JW9
IC2
T2
E3
Q3
T3
C10
R14
IC3
R26
JW5
JW12
JW10
JW11
RV3
Q1
JW20
L3
RV4
C11
R15
C13
6
5
4

RP-35:PB AMPLIFIER

RP-35 (1-623-340-11)

CN1	B-5	T1	B-3
CN2	B-2	T2	B-5
CN3	B-1	T3	B-5
CN4	B-6	T4	B-5
		T5	B-5
CP1	B-5		
CP2	B-5	TP1	B-2
		TP2	B-2
D1	B-3	TP3	B-2
D2	B-3	TP4	B-3
D3	B-1	TP7	B-6
D4	B-4	TP10	B-6
D5	B-2		
D6	B-2	W1	B-1
E1	B-2		
E2	A-1		
E3	B-6		
E4	B-6		
IC1	C-3		
IC2	B-4		
IC3	B-6		
IC4	A-3		
IC5	B-4		
IC6	B-6		
Q1	B-4		
Q2	B-4		
Q3	B-6		
Q5	B-6		
Q6	B-2		
Q7	B-1		
Q8	B-1		
Q9	B-1		
Q10	B-1		
RV1	B-2		
RV2	B-1		
RV3	B-4		
RV4	C-6		
RV5	B-4		
RV6	A-6		
RV7	B-2		
RV8	B-1		

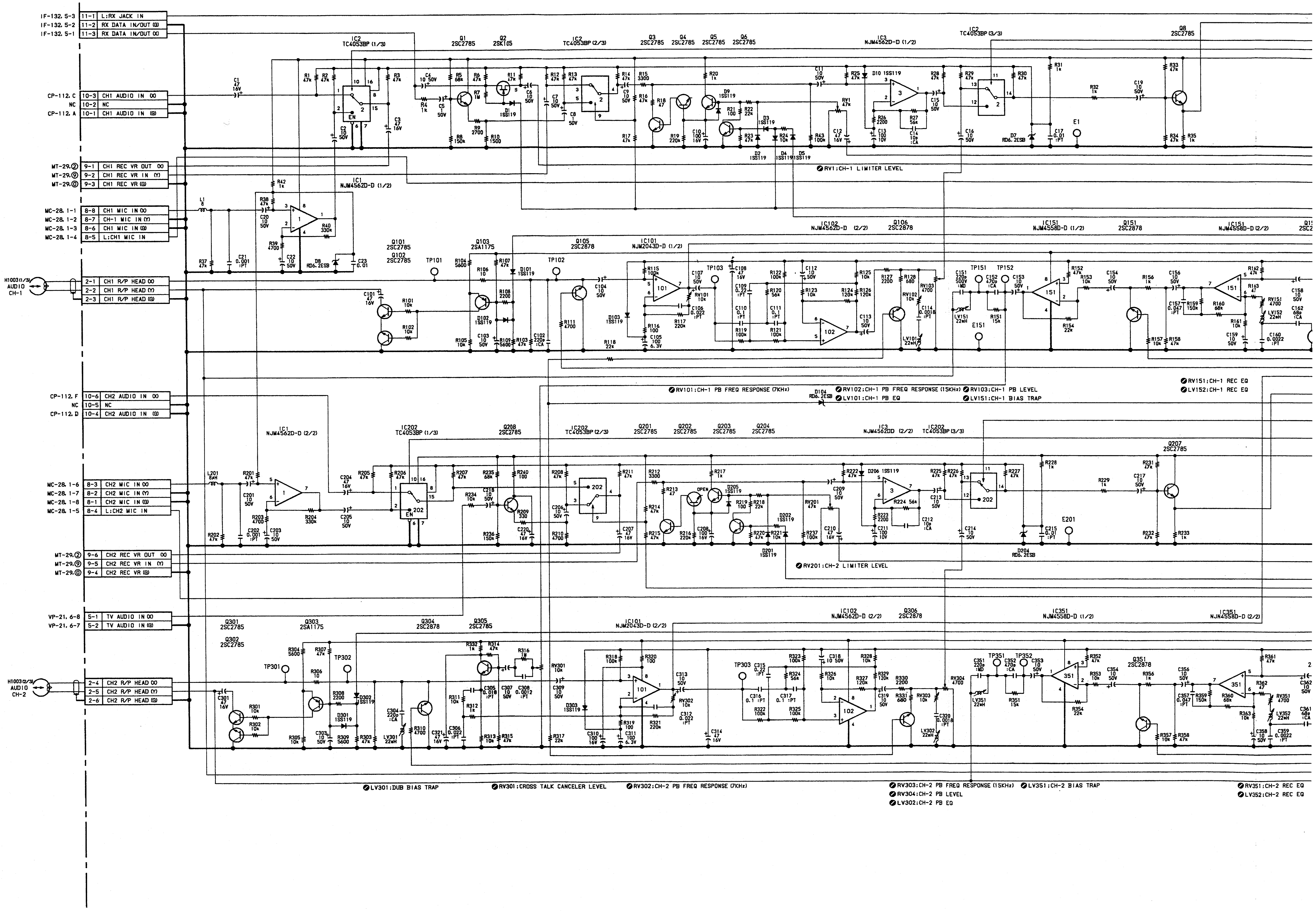

GCMK-77X
MADE IN JAPAN
SONY
1-623-340-11
RP-35
A
B
C
C17
L4
RV6
R23
C16
IC6
R24
C19
R29
T4
JW1
C15
IC4
IC5
R32
R17
L1
TP2
C2
C3
E2
E4
Q5
T5
R28
CP1
CP2
CN1
CN4
C20
TP7
TP10
R25
Q3
T3
E3
C10
R14
IC3
R26
C11
L3
RV4
R15
C13
R22
C9
C8
RV5
Q2
R18
D4
T1
R31
CN2
TP1
W2
D6
R38
D3
R36
R35
R37
Q10
Q7
Q8
W1
Q9
T2
IC2
D1
C7
R3
R4
R27
R33
D5
R12
R13
D2
L2
TP3
E1
TP4
RV3
Q1
R10
C6
R5
C5
RV1
RV7
RV8
RV2
R34
C12
CN3
IC1
LOT NO.
1
2
3
4
5
6

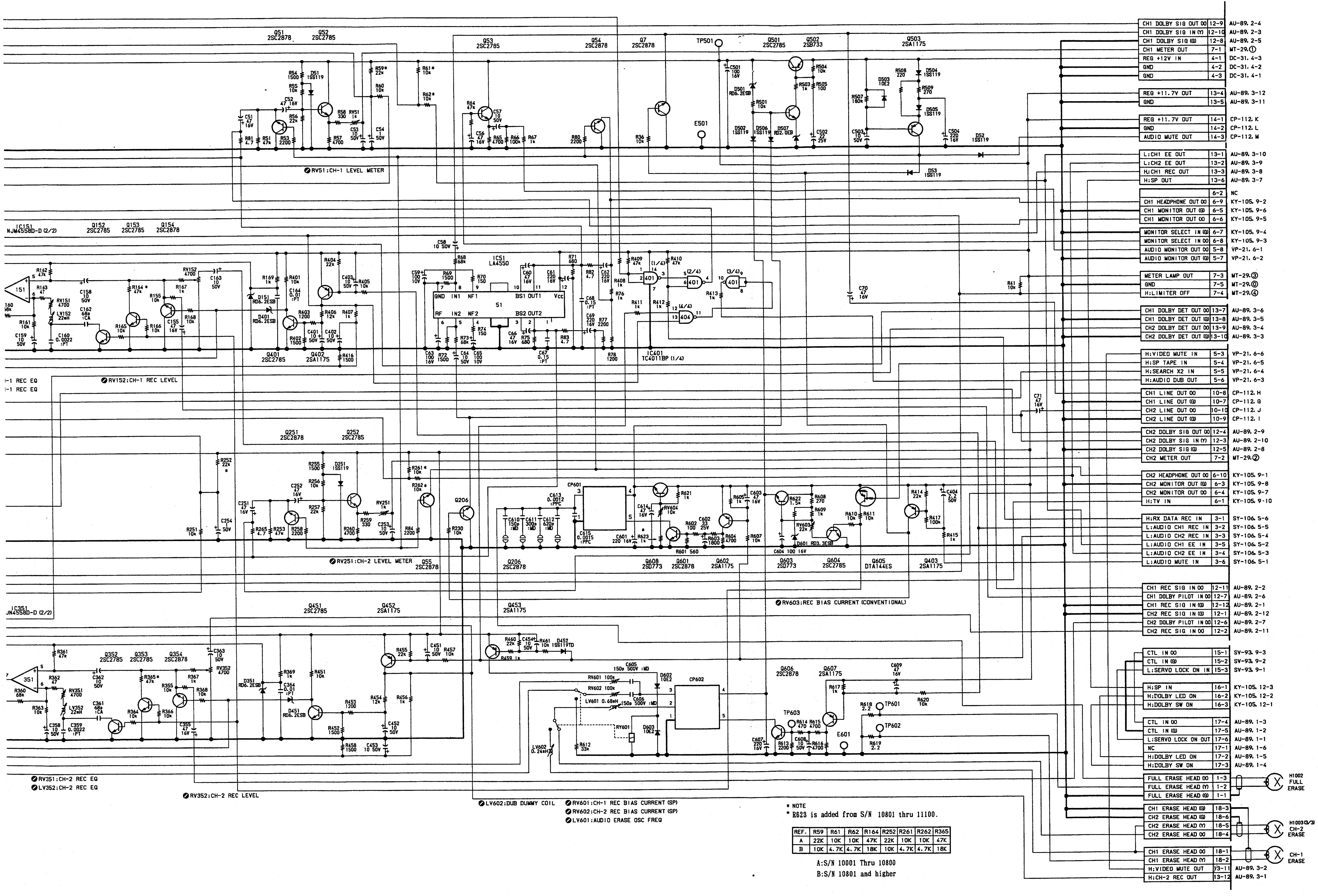
RP-35

-COMPONENT SIDE-

1-623-340-11
V0-9600P

AU-82:PB AMPLIFIER
EK;S/N 10001 and higher


IF-132. S-3 11-1 L:RX JACK IN
IF-132. S-2 11-2 RX DATA IN/OUT (G)
IF-132. S-1 11-3 RX DATA IN/OUT (O)
CP-112. C 10-3 CH1 AUDIO IN (O)
NC 10-2 NC
CP-112. A 10-1 CH1 AUDIO IN (G)
MT-29.② 9-1 CH1 REC VR OUT (O)
MT-29.⑨ 9-2 CH1 REC VR IN (Y)
MT-29.⑩ 9-3 CH1 REC VR (G)
MC-28. 1-1 8-8 CH1 MIC IN (O)
MC-28. 1-2 8-7 CH-1 MIC IN (Y)
MC-28. 1-3 8-6 CH1 MIC IN (G)
MC-28. 1-4 8-5 L:CH1 MIC IN
H1003(1/3) AUDIO CH-1
2-1 CH1 R/P HEAD (O)
2-2 CH1 R/P HEAD (Y)
2-3 CH1 R/P HEAD (G)
CP-112. F 10-6 CH2 AUDIO IN (O)
NC 10-5 NC
CP-112. D 10-4 CH2 AUDIO IN (G)
MC-28. 1-6 8-3 CH2 MIC IN (O)
MC-28. 1-7 8-2 CH2 MIC IN (Y)
MC-28. 1-8 8-1 CH2 MIC IN (G)
MC-28. 1-5 8-4 L:CH2 MIC IN
MT-29.② 9-6 CH2 REC VR OUT (O)
MT-29.⑨ 9-5 CH2 REC VR IN (Y)
MT-29.⑩ 9-4 CH2 REC VR (G)
VP-21. 6-8 5-1 TV AUDIO IN (O)
VP-21. 6-7 5-2 TV AUDIO IN (G)
H1003(2/3) AUDIO CH-2
2-4 CH2 R/P HEAD (O)
2-5 CH2 R/P HEAD (Y)
2-6 CH2 R/P HEAD (G)
IC2 TC4053BP (1/3)
Q1 2SC2785
Q2 2SK105
IC2 TC4053BP (2/3)
Q3 2SC2785
Q4 2SC2785
Q5 2SC2785
Q6 2SC2785
IC3 NJM4562D-D (1/2)
IC2 TC4053BP (3/3)
Q8 2SC2785
IC1 NJM4562D-D (1/2)
Q101 2SC2785
Q102 2SC2785
Q103 2SA1175
Q105 2SC2878
IC101 NJM2043D-D (1/2)
IC102 NJM4562D-D (2/2)
Q106 2SC2878
IC151 NJM4558D-D (1/2)
Q151 2SC2878
IC151 NJM4558D-D (2/2)
TP101
TP102
TP103
TP151
TP152
E1
E151
E201
IC1 NJM4562D-D (2/2)
IC202 TC4053BP (1/3)
Q208 2SC2785
IC202 TC4053BP (2/3)
Q201 2SC2785
Q202 2SC2785
Q203 2SC2785
Q204 2SC2785
IC3 NJM4562DD (2/2)
IC202 TC4053BP (3/3)
Q207 2SC2785
Q301 2SC2785
Q302 2SC2785
Q303 2SA1175
Q304 2SC2878
Q305 2SC2785
IC101 NJM2043D-D (2/2)
IC102 NJM4562D-D (2/2)
Q306 2SC2878
IC351 NJM4558D-D (1/2)
Q351 2SC2878
IC351 NJM4558D-D (2/2)
TP301
TP302
TP303
TP351
TP352
RV1:CH-1 LIMITER LEVEL
RV101:CH-1 PB FREQ RESPONSE (7KHz)
RV102:CH-1 PB FREQ RESPONSE (15KHz)
LV101:CH-1 PB EQ
RV103:CH-1 PB LEVEL
LV151:CH-1 BIAS TRAP
RV151:CH-1 REC EQ
LV152:CH-1 REC EQ
RV201:CH-2 LIMITER LEVEL
LV301:DUB BIAS TRAP
RV301:CROSS TALK CANCELER LEVEL
RV302:CH-2 PB FREQ RESPONSE (7KHz)
RV303:CH-2 PB FREQ RESPONSE (15KHz)
RV304:CH-2 PB LEVEL
LV302:CH-2 PB EQ
LV351:CH-2 BIAS TRAP
RV351:CH-2 REC EQ
LV352:CH-2 REC EQ


Q51 2SC2878
Q52 2SC2785
Q53 2SC2785
Q54 2SC2878
Q7 2SC2878
TP501
Q501 2SC2785
Q502 2SB733
Q503 2SA1175
E501
IC151 NJM4558D-D (2/2)
Q152 2SC2785
Q153 2SC2785
Q154 2SC2878
IC51 LA4550
IC401 TC4011BP (1/4)
Q401 2SC2785
Q402 2SA1175
RVS1:CH-1 LEVEL METER
RV152:CH-1 REC LEVEL
-1 REC EQ
-1 REC EQ
Q251 2SC2878
Q252 2SC2785
Q206
CP601
RV251:CH-2 LEVEL METER
Q55 2SC2878
Q206 2SC2878
Q608 2SD773
Q601 2SC2878
Q602 2SA1175
Q603 2SD773
Q604 2SC2785
Q605 DTA144ES
Q403 2SA1175
RV603:REC BIAS CURRENT (CONVENTIONAL)
IC351 JM4558D-D (2/2)
Q451 2SC2785
Q452 2SA1175
Q453 2SA1175
Q352 2SC2785
Q353 2SC2785
Q354 2SC2878
CP602
Q606 2SC2878
Q607 2SA1175
TP603
TP601
TP602
E601
RV351:CH-2 REC EQ
LV352:CH-2 REC EQ
RV352:CH-2 REC LEVEL
LV602:DUB DUMMY COIL
RV601:CH-1 REC BIAS CURRENT (SP)
RV602:CH-2 REC BIAS CURRENT (SP)
LV601:AUDIO ERASE OSC FREQ
CH1 DOLBY SIG OUT (X) 12-9 AU-89, 2-4
CH1 DOLBY SIG IN (Y) 12-10 AU-89, 2-3
CH1 DOLBY SIG (G) 12-8 AU-89, 2-5
CH1 METER OUT 7-1 MT-29.①
REG +12V IN 4-1 DC-31, 4-3
GND 4-2 DC-31, 4-2
GND 4-3 DC-31, 4-1
REG +11.7V OUT 13-4 AU-89, 3-12
GND 13-5 AU-89, 3-11
REG +11.7V OUT 14-1 CP-112, K
GND 14-2 CP-112, L
AUDIO MUTE OUT 14-3 CP-112, M
L:CH1 EE OUT 13-1 AU-89, 3-10
L:CH2 EE OUT 13-2 AU-89, 3-9
H:CH1 REC OUT 13-3 AU-89, 3-8
H:SP OUT 13-6 AU-89, 3-7
6-2 NC
CH1 HEADPHONE OUT (X) 6-9 KY-105, 9-2
CH1 MONITOR OUT (G) 6-5 KY-105, 9-6
CH1 MONITOR OUT (X) 6-6 KY-105, 9-5
MONITOR SELECT IN (G) 6-7 KY-105, 9-4
MONITOR SELECT IN (X) 6-8 KY-105, 9-3
AUDIO MONITOR OUT (X) 5-8 VP-21, 6-1
AUDIO MONITOR OUT (G) 5-7 VP-21, 6-2
METER LAMP OUT 7-3 MT-29.③
GND 7-5 MT-29.⓪
H:LIMITER OFF 7-4 MT-29.④
CH1 DOLBY DET OUT (X) 13-7 AU-89, 3-6
CH1 DOLBY DET OUT (G) 13-8 AU-89, 3-5
CH2 DOLBY DET OUT (X) 13-9 AU-89, 3-4
CH2 DOLBY DET OUT (G) 13-10 AU-89, 3-3
H:VIDEO MUTE IN 5-3 VP-21, 6-6
H:SP TAPE IN 5-4 VP-21, 6-5
H:SEARCH X2 IN 5-5 VP-21, 6-4
H:AUDIO DUB OUT 5-6 VP-21, 6-3
CH1 LINE OUT (X) 10-8 CP-112, H
CH1 LINE OUT (G) 10-7 CP-112, G
CH2 LINE OUT (X) 10-10 CP-112, J
CH2 LINE OUT (G) 10-9 CP-112, I
CH2 DOLBY SIG OUT (X) 12-4 AU-89, 2-9
CH2 DOLBY SIG IN (Y) 12-3 AU-89, 2-10
CH2 DOLBY SIG (G) 12-5 AU-89, 2-8
CH2 METER OUT 7-2 MT-29.②
CH2 HEADPHONE OUT (X) 6-10 KY-105, 9-1
CH2 MONITOR OUT (G) 6-3 KY-105, 9-8
CH2 MONITOR OUT (X) 6-4 KY-105, 9-7
H:TV IN 6-1 KY-105, 9-10
H:RX DATA REC IN 3-1 SY-106, 5-6
L:AUDIO CH1 REC IN 3-2 SY-106, 5-5
L:AUDIO CH2 REC IN 3-3 SY-106, 5-4
L:AUDIO CH1 EE IN 3-5 SY-106, 5-2
L:AUDIO CH2 EE IN 3-4 SY-106, 5-3
L:AUDIO MUTE IN 3-6 SY-106, 5-1
CH1 REC SIG IN (X) 12-11 AU-89, 2-2
CH1 DOLBY PILOT IN (X) 12-7 AU-89, 2-6
CH1 REC SIG IN (G) 12-12 AU-89, 2-1
CH2 REC SIG IN (G) 12-1 AU-89, 2-12
CH2 DOLBY PILOT IN (X) 12-6 AU-89, 2-7
CH2 REC SIG IN (X) 12-2 AU-89, 2-11
CTL IN (X) 15-1 SV-93, 9-3
CTL IN (G) 15-2 SV-93, 9-2
L:SERVO LOCK ON IN 15-3 SV-93, 9-1
H:SP IN 16-1 KY-105, 12-3
H:DOLBY LED ON 16-2 KY-105, 12-2
H:DOLBY SW ON 16-3 KY-105, 12-1
CTL IN (X) 17-4 AU-89, 1-3
CTL IN (G) 17-5 AU-89, 1-2
L:SERVO LOCK ON OUT 17-6 AU-89, 1-1
NC 17-1 AU-89, 1-6
H:DOLBY LED ON 17-2 AU-89, 1-5
H:DOLBY SW ON 17-3 AU-89, 1-4
FULL ERASE HEAD (X) 1-3
FULL ERASE HEAD (Y) 1-2
FULL ERASE HEAD (G) 1-1
H1002 FULL ERASE
CH1 ERASE HEAD (G) 18-3
CH2 ERASE HEAD (G) 18-6
CH2 ERASE HEAD (Y) 18-5
CH2 ERASE HEAD (X) 18-4
H1003(3/3) CH-2 ERASE
CH1 ERASE HEAD (X) 18-1
CH1 ERASE HEAD (Y) 18-2
CH-1 ERASE
H:VIDEO MUTE OUT 13-11 AU-89, 3-2
H:CH-2 REC OUT 13-12 AU-89, 3-1

* NOTE

* R623 is added from S/N 10801 thru 11100.

REF.	R59	R61	R62	R164	R252	R261	R262	R365
A	22K	10K	10K	47K	22K	10K	10K	47K
B	10K	4.7K	4.7K	18K	10K	4.7K	4.7K	18K

A:S/N 10001 Thru 10800

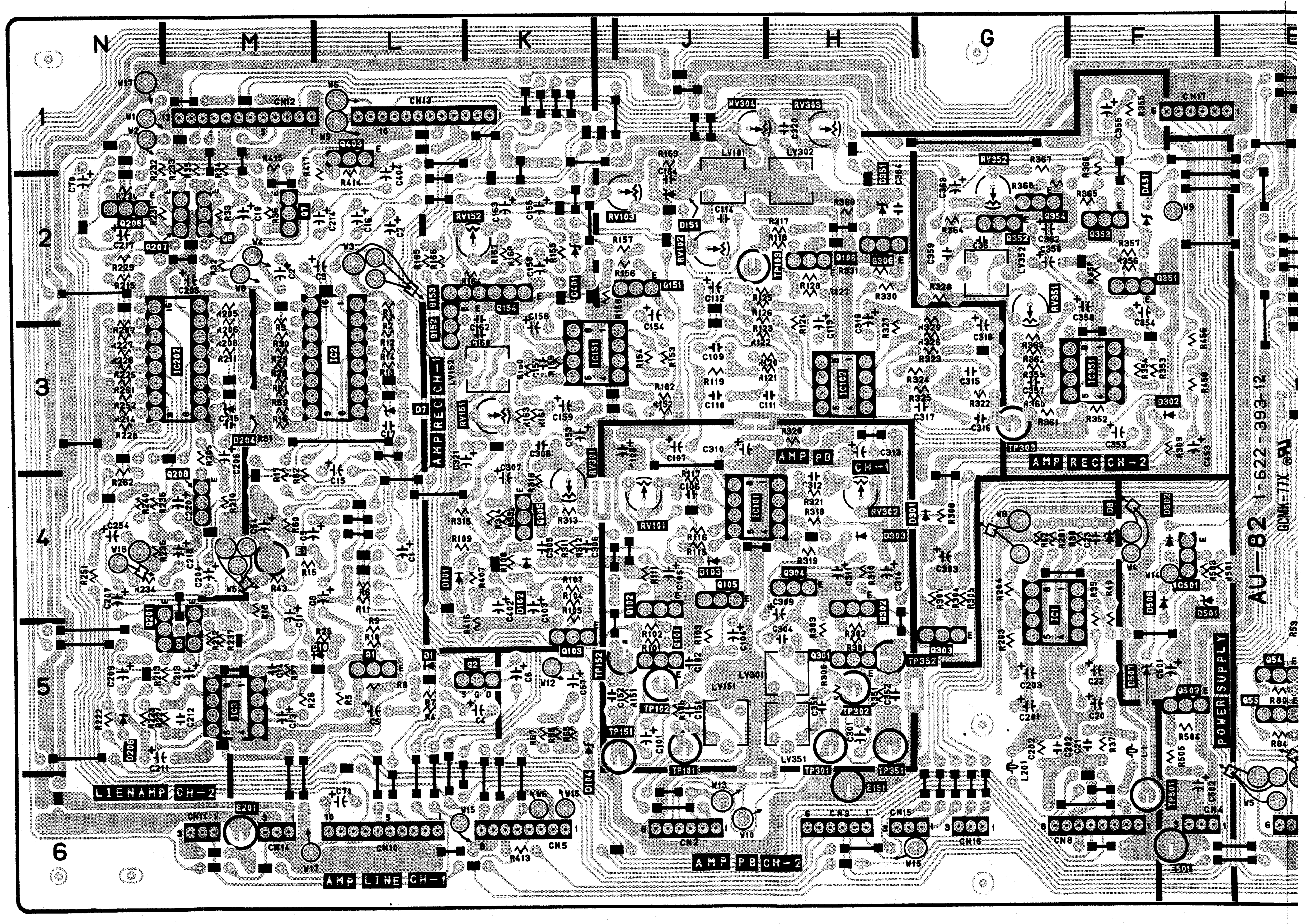
B:S/N 10801 and higher

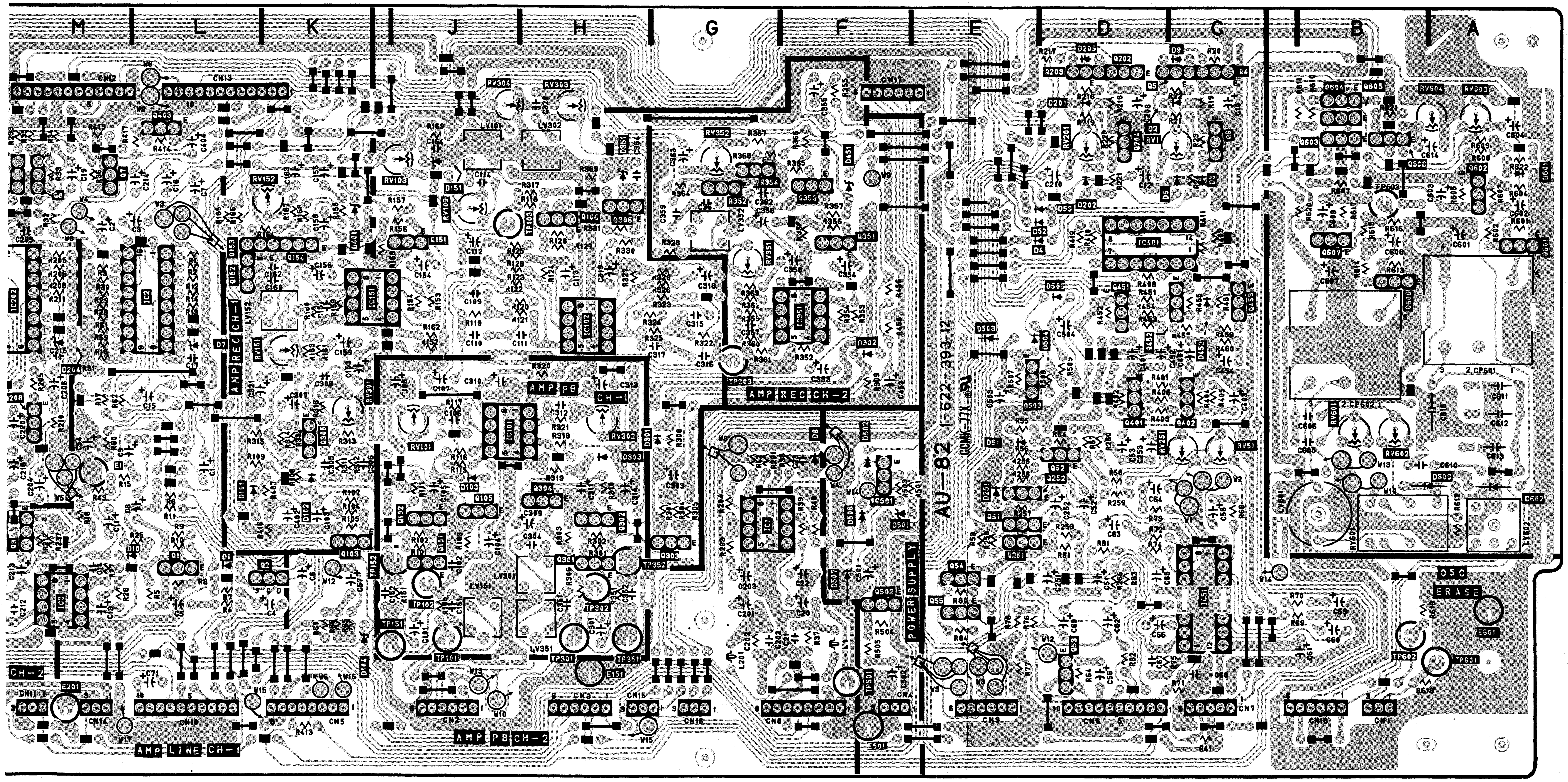
AU-82
1-622-393-12.13
VO-9600P

AU-82:PB AMPLIFIER
EK;S/N 10001 thru 10800

AU-82 (1-622-393-12)

CN1	B-6
CN2	J-6
CN3	H-6
CN4	F-6
CN5	K-6
CN6	D-6
CN7	C-6
CN8	F-6
CN9	E-6
CN10	L-6
CN11	M-6
CN12	M-1
CN13	L-1
CN14	M-6
CN15	H-6
CN16	G-6
CN17	F-1
CN18	B-6
CP601	A-3
CP602	B-3
D1	L-5
D2	C-1
D3	C-2
D4	D-2
D5	C-2
D7	L-3
D8	F-4
D9	C-1
D10	M-5
D51	E-4
D52	D-2
D53	D-2
D101	L-4
D102	K-4
D103	J-4
D104	K-5
D151	J-2
D201	D-1
D202	D-2
D204	M-3
D205	D-1
D206	N-5
D251	E-4
D301	G-4
D302	F-3
D303	H-4
D351	H-2
D401	K-2
D451	F-2
D452	C-3
D501	F-4
D502	F-4
D503	E-3
D504	E-3
D505	D-3
D506	F-4
D507	F-5
D601	A-2
D602	A-4
D603	B-4
E1	M-4
E151	H-6
E201	M-6
E501	F-5
E601	A-5
IC1	G-5
IC2	L-3
IC3	M-5
IC51	C-5
IC101	J-4
IC102	H-3
IC151	K-3
IC202	M-3
IC351	F-3
IC401	D-2
LV101	J-2
LV151	J-5
LV152	K-3
LV301	H-5
LV302	H-2
LV351	H-5
LV352	G-2
LV601	B-4
LV602	A-4
Q1	L-5
Q2	L-5
Q3	M-5
Q4	C-1
Q5	C-1
Q6	C-2
Q7	M-2
Q8	M-2
Q34	E-5
Q51	E-4
Q52	D-4
Q53	D-6
Q55	E-5
Q101	J-5
Q102	J-4
Q103	K-5
Q105	J-4
Q106	H-2
Q151	J-2
Q152	L-3
Q153	L-2
Q154	K-2
Q201	N-5
Q202	D-1
Q203	D-1
Q204	D-2
Q205	D-1
Q206	N-2
Q207	M-2
Q208	M-4
Q251	E-5
Q252	E-4
Q301	H-5
Q302	H-4
Q303	G-5
Q304	H-4
Q305	K-4
Q306	H-2
Q351	F-2
Q352	G-2
Q353	F-2
Q354	G-2
Q401	D-4
Q402	C-4
Q403	L-1
Q451	D-3
Q452	C-3
Q453	C-3
Q501	F-4
Q502	F-5
Q503	E-3
Q601	A-2
Q602	A-2
Q603	B-2
Q604	B-1
Q605	B-1
Q606	B-3
Q607	B-2
Q608	B-2
RV1	C-2
RV51	C-4
RV101	J-4
RV102	J-2
RV103	J-2
RV151	K-3
RV152	K-2
RV201	D-2
RV251	C-4
RV301	K-4
RV302	H-4
RV303	H-1
RV304	J-1
RV351	G-2
RV352	G-2
RV601	B-4
RV602	B-4
RV603	A-1
RV604	A-1
RY601	B-5
TP101	J-5
TP102	J-5
TP103	J-2
TP151	J-5
TP152	J-5
TP301	H-5
TP302	H-5
TP303	G-3
TP351	H-5
TP352	H-5
TP501	F-6
TP601	A-6
TP602	B-5
TP603	B-2




M
L
K
J
H
G
F
E
D
C
B
A
AMP REC CH-1
AMP PB CH-1
AMP REC CH-2
POWER SUPPLY
AMP PB CH-2
AMP LINE CH-1
CH-2
OSC
ERASE
AU-82
1-622-393-12
CN12
CN13
CN17
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
CN9
CN10
CN11
CN14
CN15
CN16
CN18
IC1
IC2
IC51
IC101
IC102
IC151
IC351
IC401
IC601
IC701

AU-82

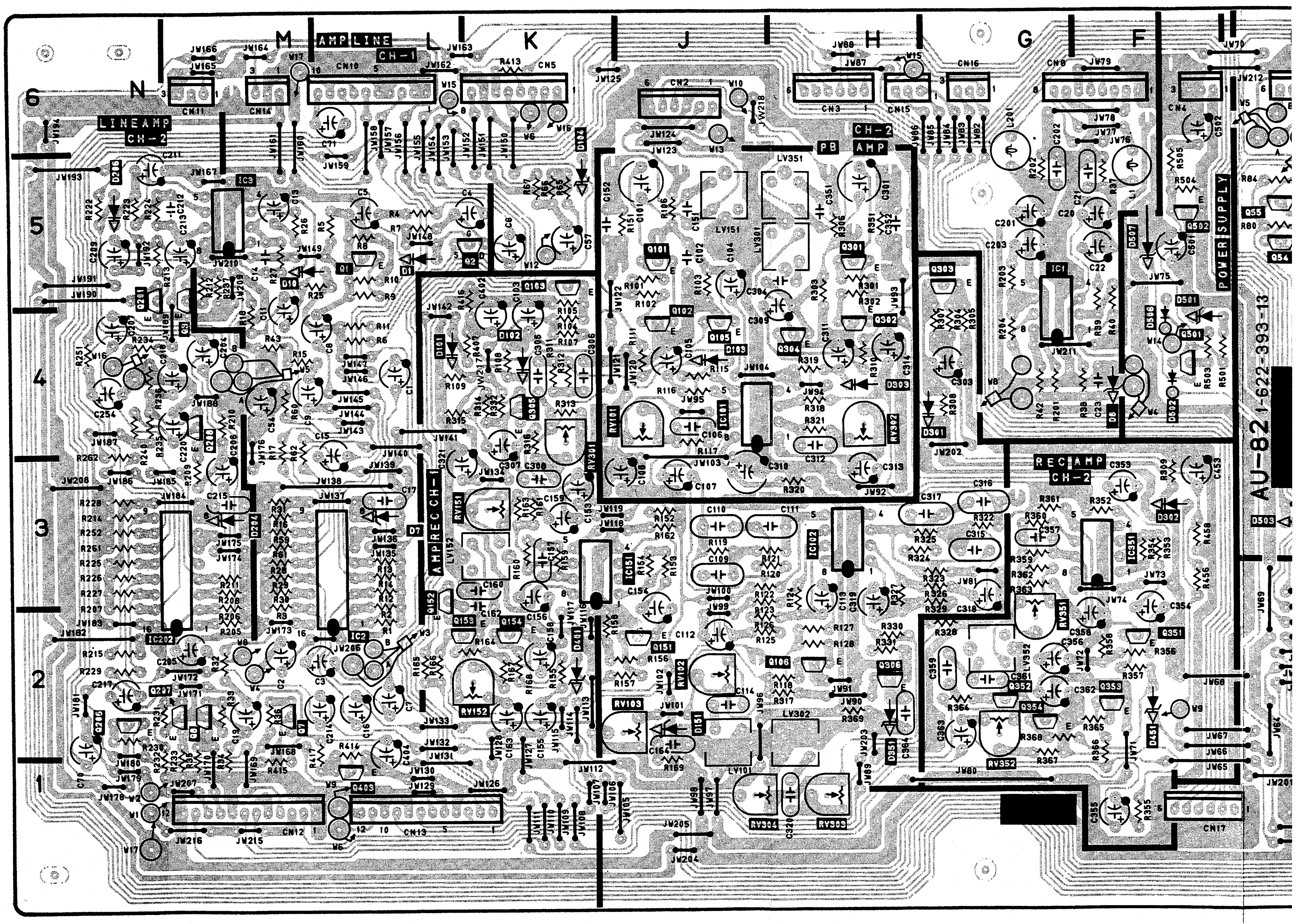
-COMPONENT SIDE-

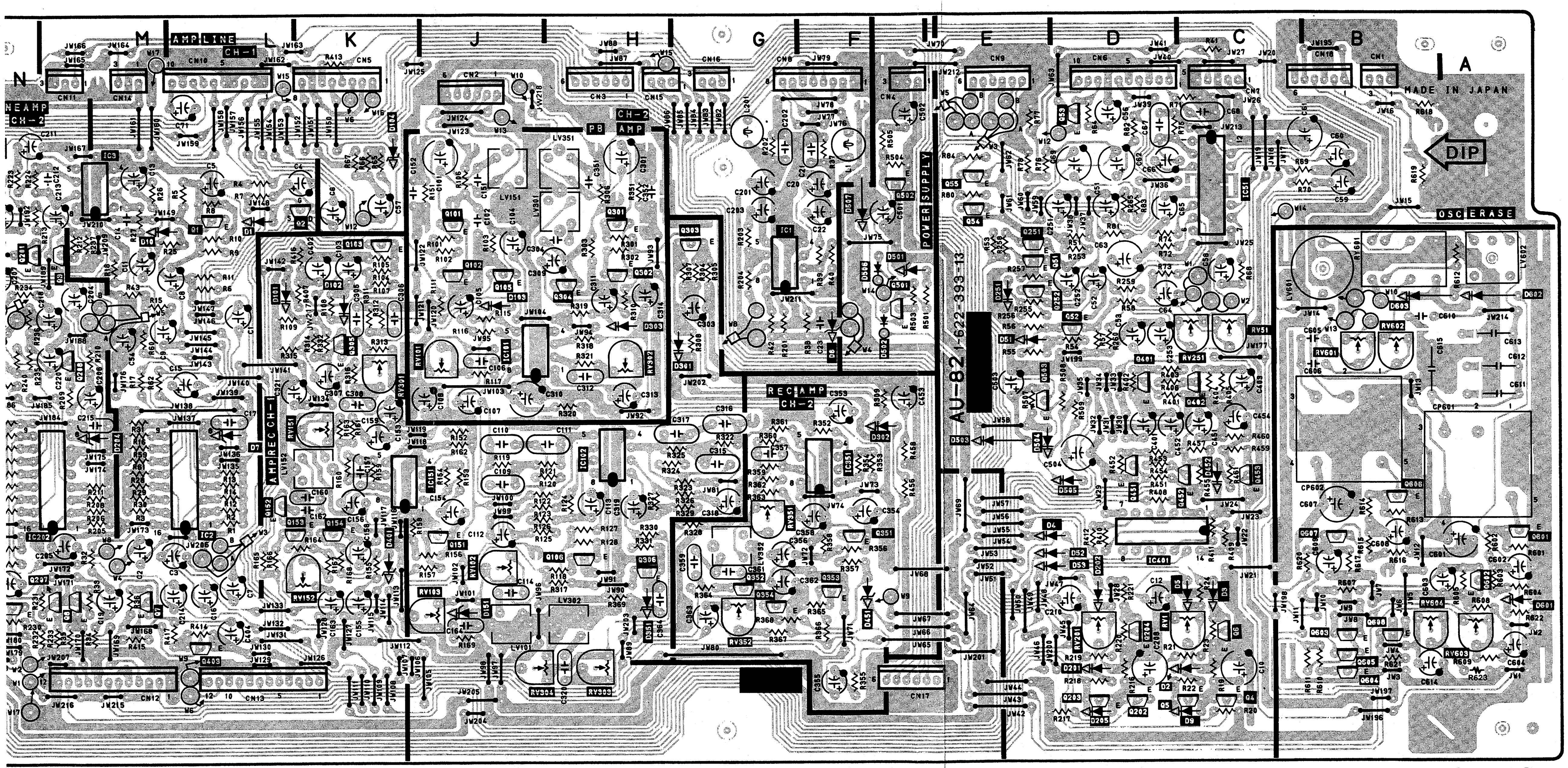
1-622-393-12
VO-9600
VO-9600P

AU-82:PB AMPLIFIER
EK;S/N 10801 and higher

AU-82 (1-622-393-13)

CN1	B-6
CN2	J-6
CN3	H-6
CN4	F-6
CN5	K-6
CN6	D-6
CN7	C-6
CN8	F-6
CN9	E-6
CN10	L-6
CN11	M-6
CN12	M-1
CN13	L-1
CN14	M-6
CN15	H-6
CN16	G-6
CN17	F-1
CN18	B-6
CP601	A-3
CP602	B-3
D1	L-5
D2	C-1
D3	C-2
D4	E-2
D5	C-2
D7	L-3
D8	F-4
D9	C-1
D10	M-5
D51	E-4
D52	E-2
D53	E-2
D101	L-4
D102	K-4
D103	J-4
D104	K-5
D151	J-2
D152	L-3
D201	D-1
D202	D-2
D204	M-3
D205	D-1
D206	N-5
D251	E-4
D301	G-4
D302	F-3
D303	H-4
D351	H-2
D401	K-2
D451	F-2
D452	C-3
D501	F-4
D502	F-4
D504	E-3
D505	D-3
D506	F-4
D507	F-5
D503	E-3
D601	A-2
D602	A-4
D603	B-4
IC1	G-4
IC2	L-3
IC3	M-5
IC51	C-5
IC101	J-4
IC102	H-3
IC151	K-3
IC202	M-3
IC351	F-3
IC401	D-2
LV101	J-2
LV151	J-5
LV152	K-3
LV301	H-5
LV302	H-2
LV351	H-5
LV352	G-2
LV601	B-4
LV602	A-4
Q1	L-5
Q2	K-5
Q3	M-5
Q4	C-1
Q5	C-1
Q6	C-1
Q7	M-2
Q8	M-2
Q51	E-4
Q52	D-4
Q53	D-6
Q54	E-5
Q55	E-5
Q59	D-6
Q101	J-5
Q102	J-4
Q103	K-5
Q105	J-4
Q106	H-2
Q151	J-2
Q152	L-3
Q153	K-2
Q154	K-2
Q201	N-5
Q202	D-1
Q203	D-1
Q204	D-2
Q206	N-2
Q207	M-2
Q208	M-4
Q251	E-5
Q252	E-4
Q301	H-5
Q302	H-4
Q303	G-5
Q304	H-4
Q305	K-4
Q306	H-2
Q351	F-2
Q352	G-2
Q353	F-2
Q354	G-2
Q401	D-3
Q402	C-3
Q403	L-1
Q451	D-3
Q452	C-3
Q453	C-3
Q501	F-4
Q502	F-5
Q503	E-3
Q601	A-2
Q602	A-2
Q603	B-1
Q604	B-1
Q605	B-1
Q606	B-3
Q607	B-2
Q608	B-1
RV1	C-1
RV51	C-4
RV101	J-4
RV102	J-2
RV103	J-2
RV151	K-3
RV152	K-2
RV201	D-1
RV251	C-4
RV301	K-4
RV302	H-4
RV303	H-1
RV304	J-1
RV351	G-2
RV352	G-2
RV601	B-4
RV602	B-4
RV603	A-2
RV604	B-2



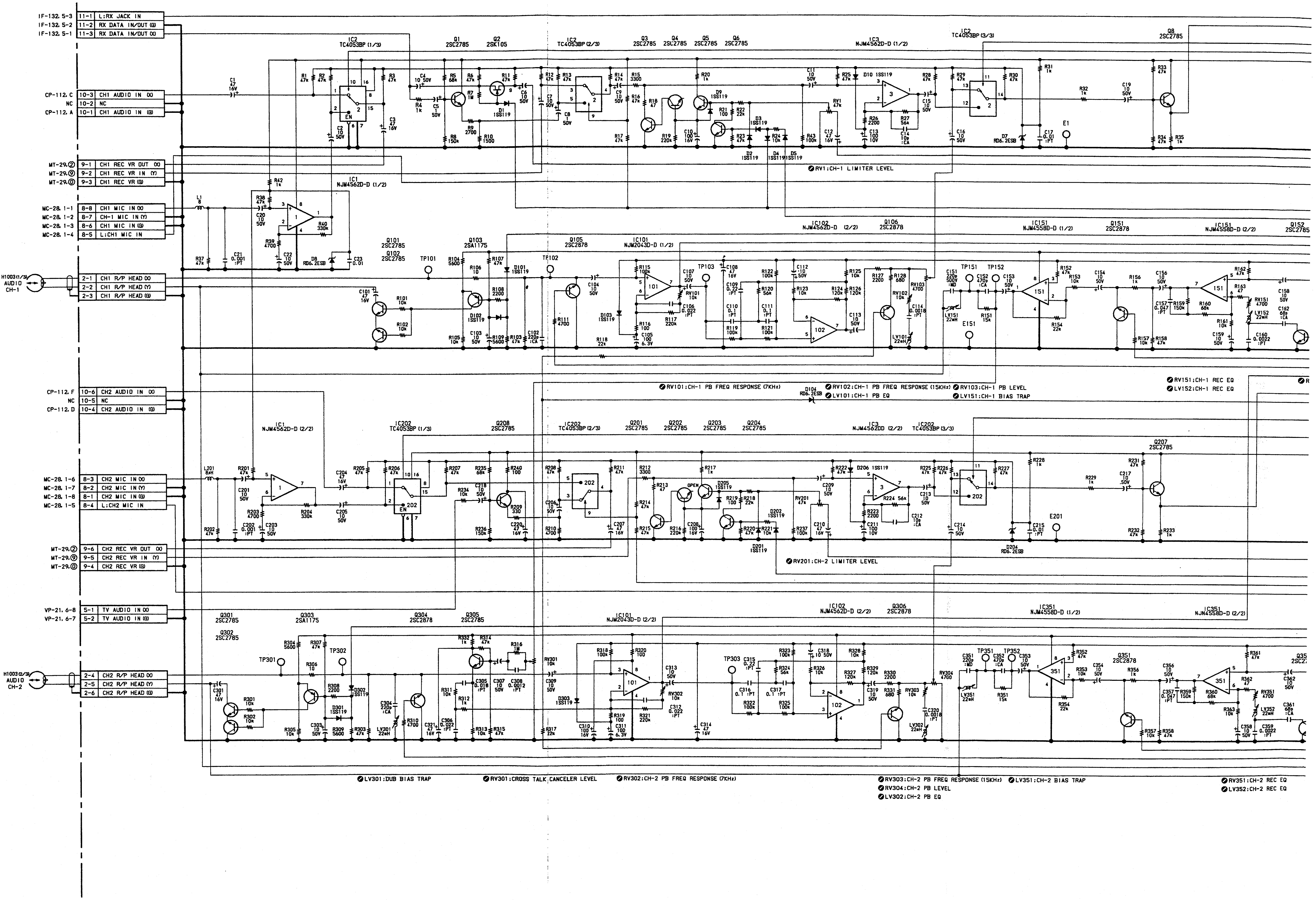

N
M
L
K
J
I
H
G
F
E
D
C
B
A
AMP LINE CH-1
NE AMP CH-2
PB CH-2 AMP
POWER SUPPLY
REC AMP CH-2
AMP REC CH-1
OSC ERASE
DIP
MADE IN JAPAN
AU-82 1-622-393-13

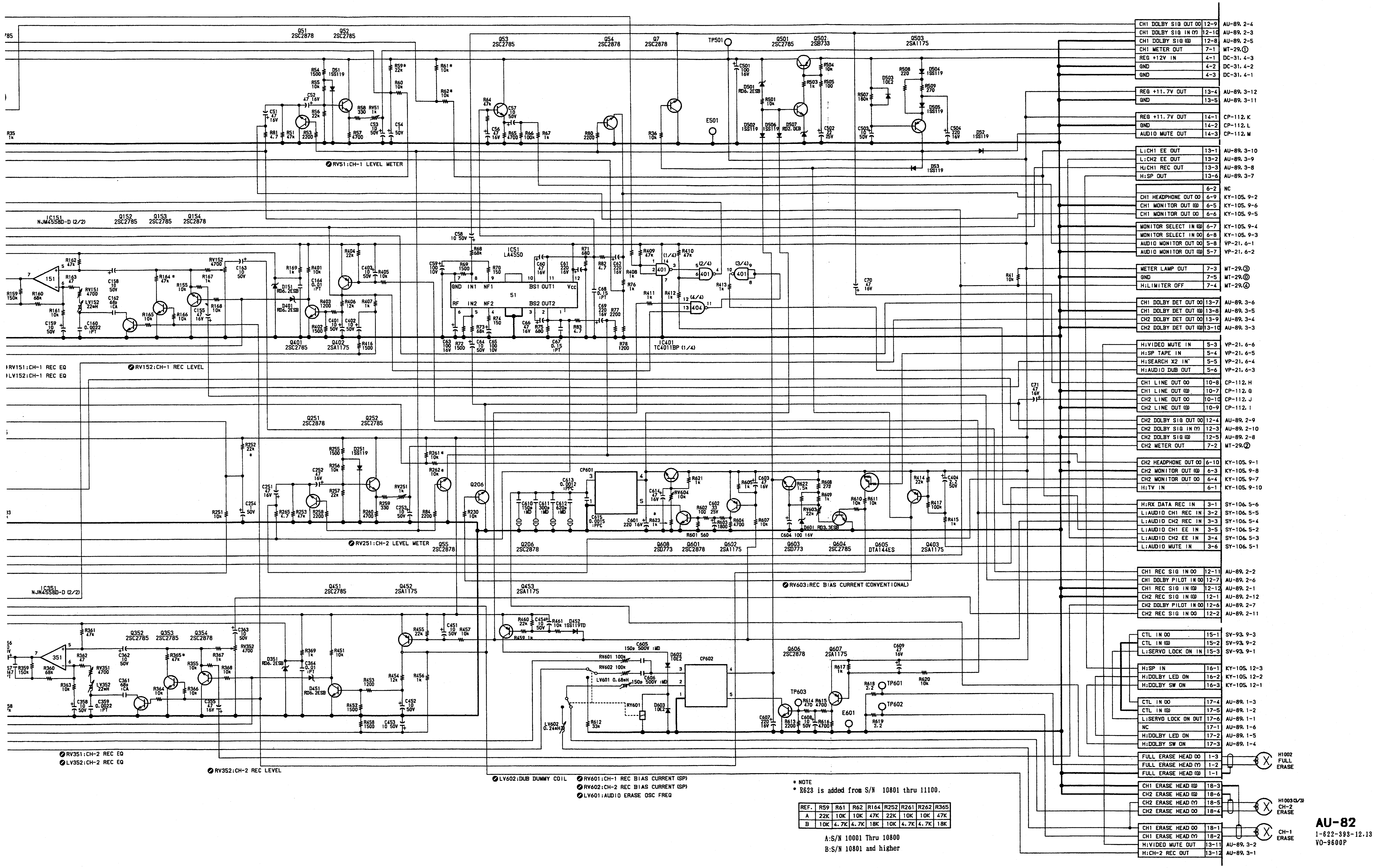
AU-82

-COMPONENT SIDE-

1-622-393-13
VO-9600
VO-9600P

AU-82:PB AMPLIFIER
EK;S/N 10001 and higher


IF-132, 5-3 11-1 L;RX JACK IN
IF-132, 5-2 11-2 RX DATA IN/OUT (G)
IF-132, 5-1 11-3 RX DATA IN/OUT (X)
CP-112, C 10-3 CH1 AUDIO IN (X)
NC 10-2 NC
CP-112, A 10-1 CH1 AUDIO IN (G)
MT-29,② 9-1 CH1 REC VR OUT (X)
MT-29,⑨ 9-2 CH1 REC VR IN (Y)
MT-29,⓪ 9-3 CH1 REC VR (G)
MC-28, 1-1 8-8 CH1 MIC IN (X)
MC-28, 1-2 8-7 CH-1 MIC IN (Y)
MC-28, 1-3 8-6 CH1 MIC IN (G)
MC-28, 1-4 8-5 L;CH1 MIC IN
H1003(1/3) AUDIO CH-1
2-1 CH1 R/P HEAD (X)
2-2 CH1 R/P HEAD (Y)
2-3 CH1 R/P HEAD (G)
CP-112, F 10-6 CH2 AUDIO IN (X)
NC 10-5 NC
CP-112, D 10-4 CH2 AUDIO IN (G)
MC-28, 1-6 8-3 CH2 MIC IN (X)
MC-28, 1-7 8-2 CH2 MIC IN (Y)
MC-28, 1-8 8-1 CH2 MIC IN (G)
MC-28, 1-5 8-4 L;CH2 MIC IN
MT-29,② 9-6 CH2 REC VR OUT (X)
MT-29,⑨ 9-5 CH2 REC VR IN (Y)
MT-29,⓪ 9-4 CH2 REC VR (G)
VP-21, 6-8 5-1 TV AUDIO IN (X)
VP-21, 6-7 5-2 TV AUDIO IN (G)
H1003(2/3) AUDIO CH-2
2-4 CH2 R/P HEAD (X)
2-5 CH2 R/P HEAD (Y)
2-6 CH2 R/P HEAD (G)
IC2 TC4053BP (1/3)
Q1 2SC2785
Q2 2SK105
IC2 TC4053BP (2/3)
Q3 2SC2785
Q4 2SC2785
Q5 2SC2785
Q6 2SC2785
IC3 NJM4562D-D (1/2)
IC2 TC4053BP (3/3)
Q8 2SC2785
IC1 NJM4562D-D (1/2)
ØRV1:CH-1 LIMITER LEVEL
Q101 2SC2785
Q102 2SC2785
Q103 2SA1175
Q105 2SC2878
IC101 NJM2043D-D (1/2)
IC102 NJM4562D-D (2/2)
Q106 2SC2878
IC151 NJM4558D-D (1/2)
Q151 2SC2878
IC151 NJM4558D-D (2/2)
Q152 2SC2785
TP101
TP102
TP103
TP151
TP152
E1
E151
ØRV101:CH-1 PB FREQ RESPONSE (7KHz)
ØRV102:CH-1 PB FREQ RESPONSE (15KHz)
ØLV101:CH-1 PB EQ
ØRV103:CH-1 PB LEVEL
ØLV151:CH-1 BIAS TRAP
ØRV151:CH-1 REC EQ
ØLV152:CH-1 REC EQ
IC1 NJM4562D-D (2/2)
IC202 TC4053BP (1/3)
Q208 2SC2785
IC202 TC4053BP (2/3)
Q201 2SC2785
Q202 2SC2785
Q203 2SC2785
Q204 2SC2785
IC3 NJM4562DD (2/2)
IC202 TC4053BP (3/3)
Q207 2SC2785
E201
ØRV201:CH-2 LIMITER LEVEL
Q301 2SC2785
Q302 2SC2785
Q303 2SA1175
Q304 2SC2878
Q305 2SC2785
IC101 NJM2043D-D (2/2)
IC102 NJM4562D-D (2/2)
Q306 2SC2878
IC351 NJM4558D-D (1/2)
Q351 2SC2878
IC351 NJM4558D-D (2/2)
TP301
TP302
TP303
TP351
TP352
ØLV301:DUB BIAS TRAP
ØRV301:CROSS TALK CANCELER LEVEL
ØRV302:CH-2 PB FREQ RESPONSE (7KHz)
ØRV303:CH-2 PB FREQ RESPONSE (15KHz)
ØRV304:CH-2 PB LEVEL
ØLV302:CH-2 PB EQ
ØLV351:CH-2 BIAS TRAP
ØRV351:CH-2 REC EQ
ØLV352:CH-2 REC EQ


IC151 NJM4558D-D (2/2)
Q152 2SC2785
Q153 2SC2785
Q154 2SC2878
Q51 2SC2878
Q52 2SC2785
Q53 2SC2785
Q54 2SC2878
Q7 2SC2878
TP501
Q501 2SC2785
Q502 2SB733
Q503 2SA1175
E501
IC51 LA4550
IC401 TC4011BP (1/4)
Q401 2SC2785
Q402 2SA1175
Q251 2SC2878
Q252 2SC2785
Q206
CP601
Q55 2SC2878
Q206 2SC2878
Q608 2SD773
Q601 2SC2878
Q602 2SA1175
Q603 2SD773
Q604 2SC2785
Q605 DTA144ES
Q403 2SA1175
IC351 NJM4558D-D (2/2)
Q352 2SC2785
Q353 2SC2785
Q354 2SC2878
Q451 2SC2785
Q452 2SA1175
Q453 2SA1175
CP602
Q606 2SC2878
Q607 2SA1175
TP601
TP602
TP603
E601
RV51:CH-1 LEVEL METER
RV151:CH-1 REC EQ
LV152:CH-1 REC EQ
RV152:CH-1 REC LEVEL
RV251:CH-2 LEVEL METER
RV603:REC BIAS CURRENT (CONVENTIONAL)
RV351:CH-2 REC EQ
LV352:CH-2 REC EQ
RV352:CH-2 REC LEVEL
LV602:DUB DUMMY COIL
RV601:CH-1 REC BIAS CURRENT (SP)
RV602:CH-2 REC BIAS CURRENT (SP)
LV601:AUDIO ERASE OSC FREQ
CH1 DOLBY SIG OUT (X) 12-9 AU-89, 2-4
CH1 DOLBY SIG IN (Y) 12-10 AU-89, 2-3
CH1 DOLBY SIG (G) 12-8 AU-89, 2-5
CH1 METER OUT 7-1 MT-29, ①
REG +12V IN 4-1 DC-31, 4-3
GND 4-2 DC-31, 4-2
GND 4-3 DC-31, 4-1
REG +11.7V OUT 13-4 AU-89, 3-12
GND 13-5 AU-89, 3-11
REG +11.7V OUT 14-1 CP-112, K
GND 14-2 CP-112, L
AUDIO MUTE OUT 14-3 CP-112, M
L:CH1 EE OUT 13-1 AU-89, 3-10
L:CH2 EE OUT 13-2 AU-89, 3-9
H:CH1 REC OUT 13-3 AU-89, 3-8
H:SP OUT 13-6 AU-89, 3-7
6-2 NC
CH1 HEADPHONE OUT (X) 6-9 KY-105, 9-2
CH1 MONITOR OUT (G) 6-5 KY-105, 9-6
CH1 MONITOR OUT (X) 6-6 KY-105, 9-5
MONITOR SELECT IN (G) 6-7 KY-105, 9-4
MONITOR SELECT IN (X) 6-8 KY-105, 9-3
AUDIO MONITOR OUT (X) 5-8 VP-21, 6-1
AUDIO MONITOR OUT (G) 5-7 VP-21, 6-2
METER LAMP OUT 7-3 MT-29, ③
GND 7-5 MT-29, ⓪
H:LIMITER OFF 7-4 MT-29, ④
CH1 DOLBY DET OUT (X) 13-7 AU-89, 3-6
CH1 DOLBY DET OUT (G) 13-8 AU-89, 3-5
CH2 DOLBY DET OUT (X) 13-9 AU-89, 3-4
CH2 DOLBY DET OUT (G) 13-10 AU-89, 3-3
H:VIDEO MUTE IN 5-3 VP-21, 6-6
H:SP TAPE IN 5-4 VP-21, 6-5
H:SEARCH X2 IN 5-5 VP-21, 6-4
H:AUDIO DUB OUT 5-6 VP-21, 6-3
CH1 LINE OUT (X) 10-8 CP-112, H
CH1 LINE OUT (G) 10-7 CP-112, G
CH2 LINE OUT (X) 10-10 CP-112, J
CH2 LINE OUT (G) 10-9 CP-112, I
CH2 DOLBY SIG OUT (X) 12-4 AU-89, 2-9
CH2 DOLBY SIG IN (Y) 12-3 AU-89, 2-10
CH2 DOLBY SIG (G) 12-5 AU-89, 2-8
CH2 METER OUT 7-2 MT-29, ②
CH2 HEADPHONE OUT (X) 6-10 KY-105, 9-1
CH2 MONITOR OUT (G) 6-3 KY-105, 9-8
CH2 MONITOR OUT (X) 6-4 KY-105, 9-7
H:TV IN 6-1 KY-105, 9-10
H:RX DATA REC IN 3-1 SY-106, 5-6
L:AUDIO CH1 REC IN 3-2 SY-106, 5-5
L:AUDIO CH2 REC IN 3-3 SY-106, 5-4
L:AUDIO CH1 EE IN 3-5 SY-106, 5-2
L:AUDIO CH2 EE IN 3-4 SY-106, 5-3
L:AUDIO MUTE IN 3-6 SY-106, 5-1
CH1 REC SIG IN (X) 12-11 AU-89, 2-2
CH1 DOLBY PILOT IN (X) 12-7 AU-89, 2-6
CH1 REC SIG IN (G) 12-12 AU-89, 2-1
CH2 REC SIG IN (G) 12-1 AU-89, 2-12
CH2 DOLBY PILOT IN (X) 12-6 AU-89, 2-7
CH2 REC SIG IN (X) 12-2 AU-89, 2-11
CTL IN (X) 15-1 SV-93, 9-3
CTL IN (G) 15-2 SV-93, 9-2
L:SERVO LOCK ON IN 15-3 SV-93, 9-1
H:SP IN 16-1 KY-105, 12-3
H:DOLBY LED ON 16-2 KY-105, 12-2
H:DOLBY SW ON 16-3 KY-105, 12-1
CTL IN (X) 17-4 AU-89, 1-3
CTL IN (G) 17-5 AU-89, 1-2
L:SERVO LOCK ON OUT 17-6 AU-89, 1-1
NC 17-1 AU-89, 1-6
H:DOLBY LED ON 17-2 AU-89, 1-5
H:DOLBY SW ON 17-3 AU-89, 1-4
FULL ERASE HEAD (X) 1-3
FULL ERASE HEAD (Y) 1-2
FULL ERASE HEAD (G) 1-1
H1002 FULL ERASE
CH1 ERASE HEAD (G) 18-3
CH2 ERASE HEAD (G) 18-6
CH2 ERASE HEAD (Y) 18-5
CH2 ERASE HEAD (X) 18-4
H1003(3/3) CH-2 ERASE
CH1 ERASE HEAD (X) 18-1
CH1 ERASE HEAD (Y) 18-2
CH-1 ERASE
H:VIDEO MUTE OUT 13-11 AU-89, 3-2
H:CH-2 REC OUT 13-12 AU-89, 3-1

* NOTE

- R623 is added from S/N 10801 thru 11100.

REF.	R59	R61	R62	R164	R252	R261	R262	R365
A	22K	10K	10K	47K	22K	10K	10K	47K
B	10K	4.7K	4.7K	18K	10K	4.7K	4.7K	18K

A:S/N 10001 Thru 10800

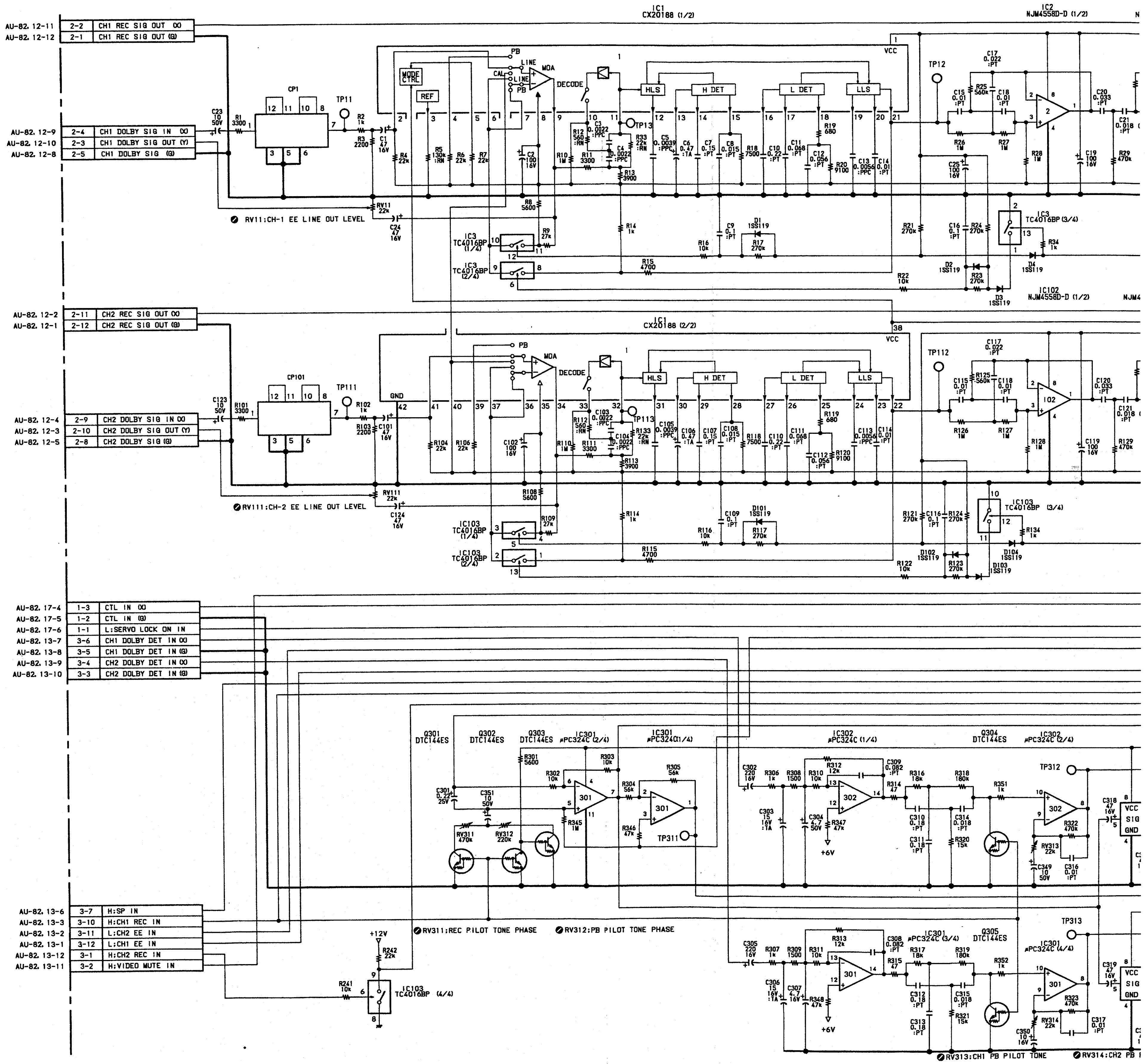
B:S/N 10801 and higher

AU-82

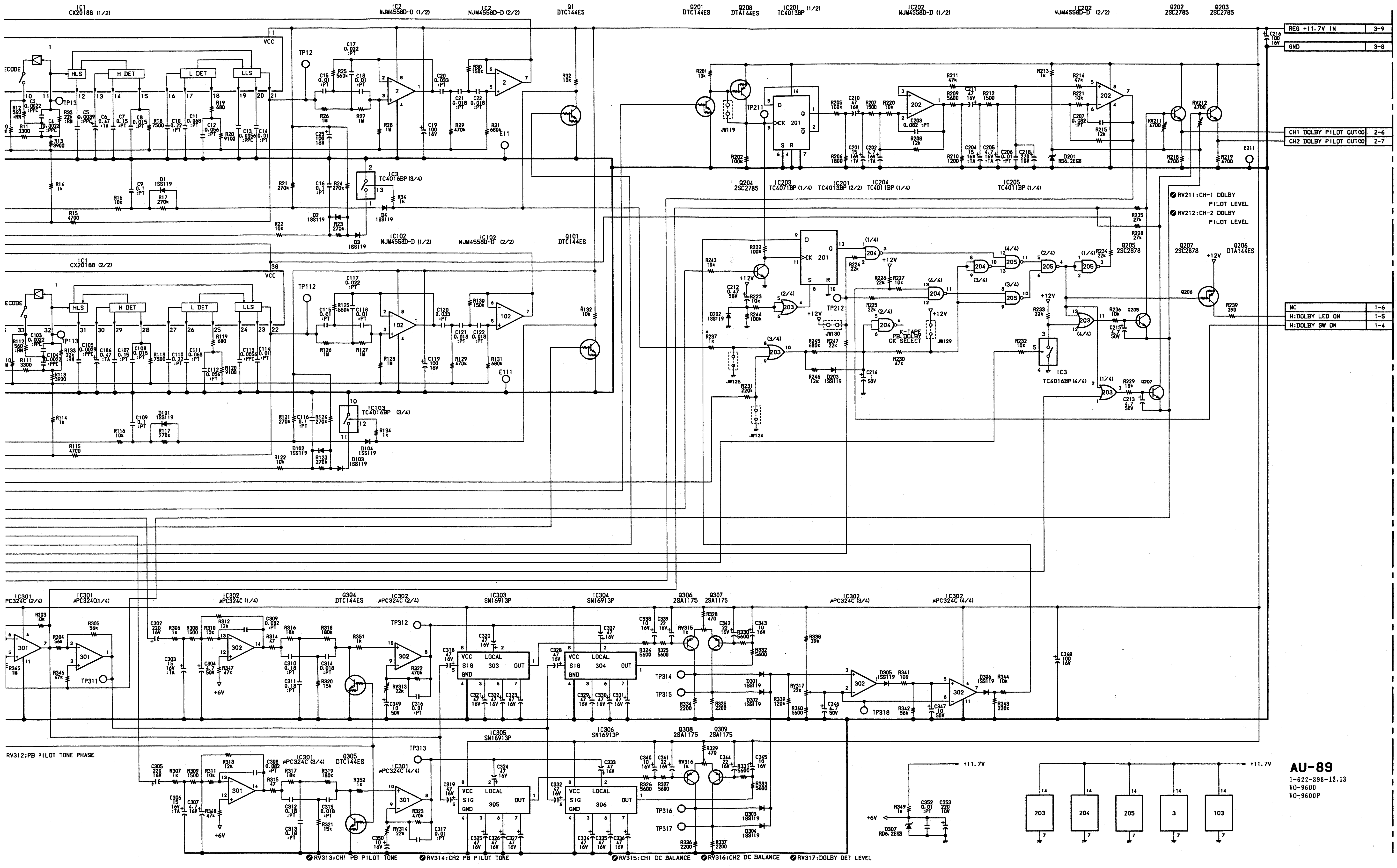
1-622-393-12.13
VO-9600P

AU-89:DOLBY

EK;S/N 10001 and higher



IC1 CX20188 (1/2)
IC2 NJM4558D-D (1/2)
IC1 CX20188 (2/2)
IC102 NJM4558D-D (1/2)
AU-82, 12-11 | 2-2 | CH1 REC SIG OUT (H)
AU-82, 12-12 | 2-1 | CH1 REC SIG OUT (G)
AU-82, 12-9 | 2-4 | CH1 DOLBY SIG IN (H)
AU-82, 12-10 | 2-3 | CH1 DOLBY SIG OUT (Y)
AU-82, 12-8 | 2-5 | CH1 DOLBY SIG (G)
AU-82, 12-2 | 2-11 | CH2 REC SIG OUT (H)
AU-82, 12-1 | 2-12 | CH2 REC SIG OUT (G)
AU-82, 12-4 | 2-9 | CH2 DOLBY SIG IN (H)
AU-82, 12-3 | 2-10 | CH2 DOLBY SIG OUT (Y)
AU-82, 12-5 | 2-8 | CH2 DOLBY SIG (G)
AU-82, 17-4 | 1-3 | CTL IN (H)
AU-82, 17-5 | 1-2 | CTL IN (G)
AU-82, 17-6 | 1-1 | L:SERVO LOCK ON IN
AU-82, 13-7 | 3-6 | CH1 DOLBY DET IN (H)
AU-82, 13-8 | 3-5 | CH1 DOLBY DET IN (G)
AU-82, 13-9 | 3-4 | CH2 DOLBY DET IN (H)
AU-82, 13-10 | 3-3 | CH2 DOLBY DET IN (G)
AU-82, 13-6 | 3-7 | H:SP IN
AU-82, 13-3 | 3-10 | H:CH1 REC IN
AU-82, 13-2 | 3-11 | L:CH2 EE IN
AU-82, 13-1 | 3-12 | L:CH1 EE IN
AU-82, 13-12 | 3-1 | H:CH2 REC IN
AU-82, 13-11 | 3-2 | H:VIDEO MUTE IN
CP1
CP101
TP11
TP12
TP13
TP111
TP112
TP113
TP311
TP312
TP313
MODE CTRL
REF
LINE
CAL
PB
MOA
DECODE
HLS
H DET
L DET
LLS
VCC
GND
IC3 TC4016BP (1/4)
IC3 TC4016BP (2/4)
IC3 TC4016BP (3/4)
IC103 TC4016BP (1/4)
IC103 TC4016BP (2/4)
IC103 TC4016BP (3/4)
IC103 TC4016BP (4/4)
RV11:CH-1 EE LINE OUT LEVEL
RV111:CH-2 EE LINE OUT LEVEL
Q301 DTC144ES
Q302 DTC144ES
Q303 DTC144ES
Q304 DTC144ES
Q305 DTC144ES
IC301 μPC324C (2/4)
IC301 μPC324C (1/4)
IC302 μPC324C (1/4)
IC302 μPC324C (2/4)
IC301 μPC324C (3/4)
IC301 μPC324C (4/4)
RV311:REC PILOT TONE PHASE
RV312:PB PILOT TONE PHASE
RV313:CH1 PB PILOT TONE
RV314:CH2 PB
+12V
+6V

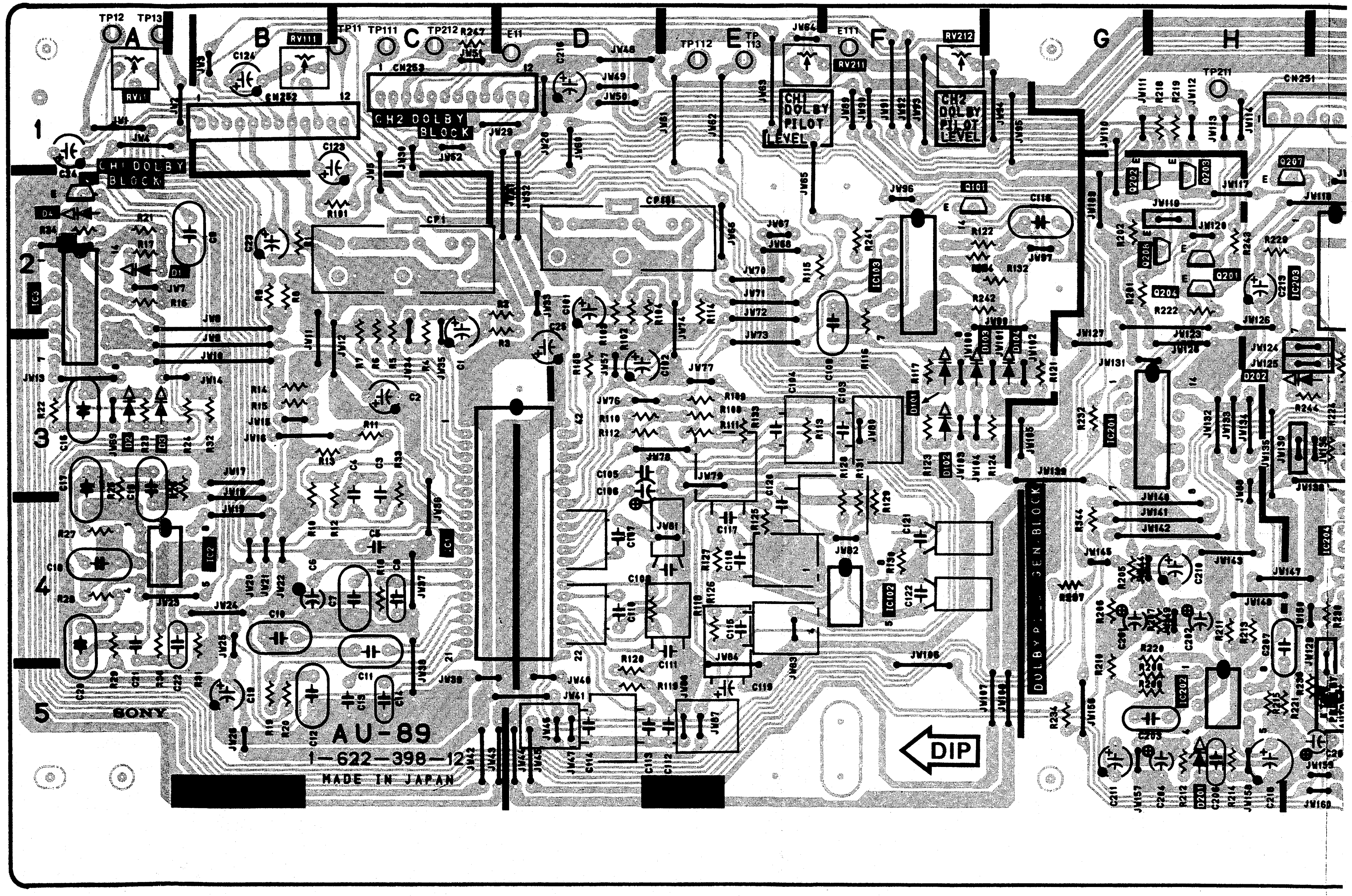

IC1 CX20188 (1/2)
IC2 NJM4558D-D (1/2)
IC2 NJM4558D-D (2/2)
Q1 DTC144ES
Q201 DTC144ES
Q208 DTA144ES
IC201 TC4013BP (1/2)
IC202 NJM4558D-D (1/2)
IC202 NJM4558D-D (2/2)
Q202 2SC2785
Q203 2SC2785
REG +11.7V IN 3-9 AU-82, 13-4
GND 3-8 AU-82, 13-5
CH1 DOLBY PILOT OUT00 2-6 AU-82, 12-7
CH2 DOLBY PILOT OUT00 2-7 AU-82, 12-6
HLS
H DET
L DET
LLS
VCC
TP12
TP112
TP13
TP113
E11
E111
E211
IC3 TC4016BP (3/4)
IC103 TC4016BP (3/4)
IC1 CX20188 (2/2)
IC102 NJM4558D-D (1/2)
IC102 NJM4558D-D (2/2)
Q101 DTC144ES
Q204 2SC2785
IC203 TC4071BP (1/4)
IC201 TC4013BP (2/2)
IC204 TC4011BP (1/4)
IC205 TC4011BP (1/4)
RV211:CH-1 DOLBY PILOT LEVEL
RV212:CH-2 DOLBY PILOT LEVEL
Q205 2SC2878
Q207 2SC2878
Q206 DTA144ES
NC 1-6 AU-82, 17-1
H:DOLBY LED ON 1-5 AU-82, 17-2
H:DOLBY SW ON 1-4 AU-82, 17-3
TP211
TP212
K-TAPE PB DOLBY OK SELECT
IC3 TC4016BP (4/4)
JW119
JW124
JW125
JW129
JW130
IC301 μPC324C (2/4)
IC301 μPC324C (1/4)
IC302 μPC324C (1/4)
Q304 DTC144ES
IC302 μPC324C (2/4)
IC303 SN16913P
IC304 SN16913P
Q306 2SA1175
Q307 2SA1175
IC302 μPC324C (3/4)
IC302 μPC324C (4/4)
VCC LOCAL SIG GND OUT
TP311
TP312
TP313
TP314
TP315
TP316
TP317
TP318
RV312:PB PILOT TONE PHASE
IC301 μPC324C (3/4)
Q305 DTC144ES
IC301 μPC324C (4/4)
IC305 SN16913P
IC306 SN16913P
Q308 2SA1175
Q309 2SA1175
+11.7V
+6V
203
204
205
3
103
RV313:CH1 PB PILOT TONE
RV314:CH2 PB PILOT TONE
RV315:CH1 DC BALANCE
RV316:CH2 DC BALANCE
RV317:DOLBY DET LEVEL
AU-89
1-622-398-12,13
VO-9600
VO-9600P

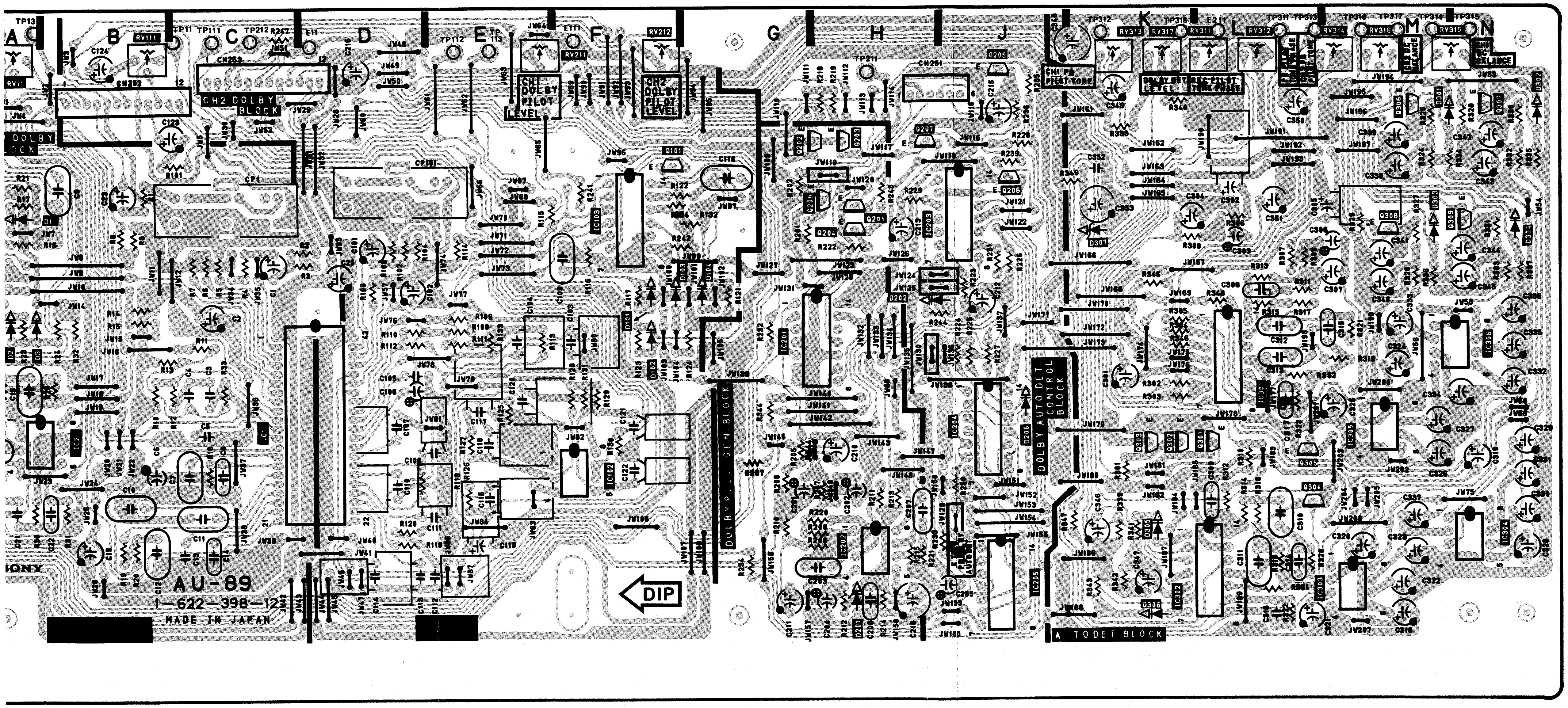
V04801 / Druck 62

AU-89:DOLBY
EK;S/N 10001 thru 10400

AU-89 (1-622-398-12)

CN251	H-1
CN252	B-1
CN253	C-1
CP1	C-2
CP101	D-2
D1	A-2
D2	A-3
D3	A-3
D4	A-2
D101	F-3
D102	F-3
D103	F-3
D104	G-3
D201	H-5
D202	H-3
D206	J-4
D301	M-1
D302	N-1
D303	M-2
D304	N-2
D305	K-5
D306	K-5
D307	K-2
E11	D-1
E111	F-1
IC1	D-4
IC2	A-4
IC3	A-2
IC102	F-4
IC103	F-2
IC201	H-3
IC202	H-5
IC203	J-2
IC204	J-4
IC205	J-5
IC301	L-3
IC302	L-5
IC303	M-5
IC304	N-5
IC305	M-4
IC306	N-3
Q1	A-2
Q101	F-2
Q201	H-2
Q202	H-2
Q203	H-2
Q204	H-2
Q205	J-1
Q206	J-2
Q207	H-2
Q208	H-2
Q301	L-4
Q302	K-4
Q303	K-4
Q304	L-4
Q305	L-4
Q306	M-1
Q307	N-1
Q308	M-2
Q309	N-2
RV11	A-1
RV111	B-1
RV211	E-1
RV212	F-1
RV311	L-1
RV312	L-1
RV313	K-1
RV314	M-1
RV315	N-1
RV316	M-1
RV317	K-1
TP11	C-1
TP12	A-1
TP13	A-1
TP111	C-1
TP112	E-1
TP113	E-1
TP211	H-1
TP212	C-1
TP311	L-1
TP312	K-1
TP313	L-1
TP314	M-1
TP315	N-1
TP316	M-1
TP317	M-1
TP318	K-1


A
B
C
D
E
F
G
H
1
2
3
4
5
CH1 DOLBY BLOCK
CH2 DOLBY BLOCK
CH1 DOLBY PILOT LEVEL
CH2 DOLBY PILOT LEVEL
DOLBY GEN. BLOCK
SONY
AU-89
1-622-398-12
MADE IN JAPAN
DIP


AU-89
1-622-398-12
MADE IN JAPAN
DIP
CH2 DOLBY BLOCK
CH1 DOLBY PILOT LEVEL
CH2 DOLBY PILOT LEVEL
DOLBY AUTO DET CONTROL BLOCK
A TO DET BLOCK
CH1 PB PILOT TONE
DOLBY DET LEVEL
REC PILOT TONE PHASE

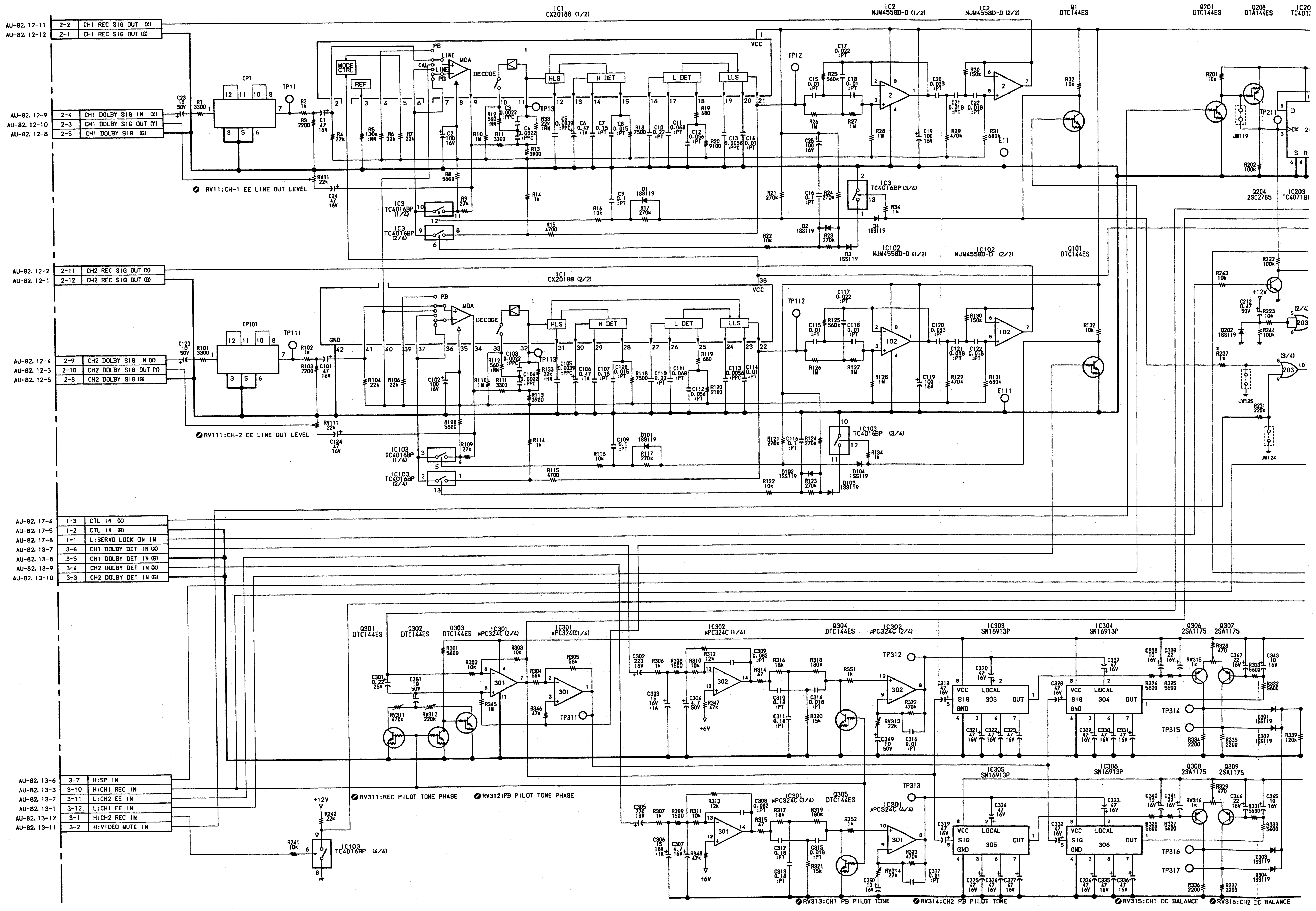
AU -89

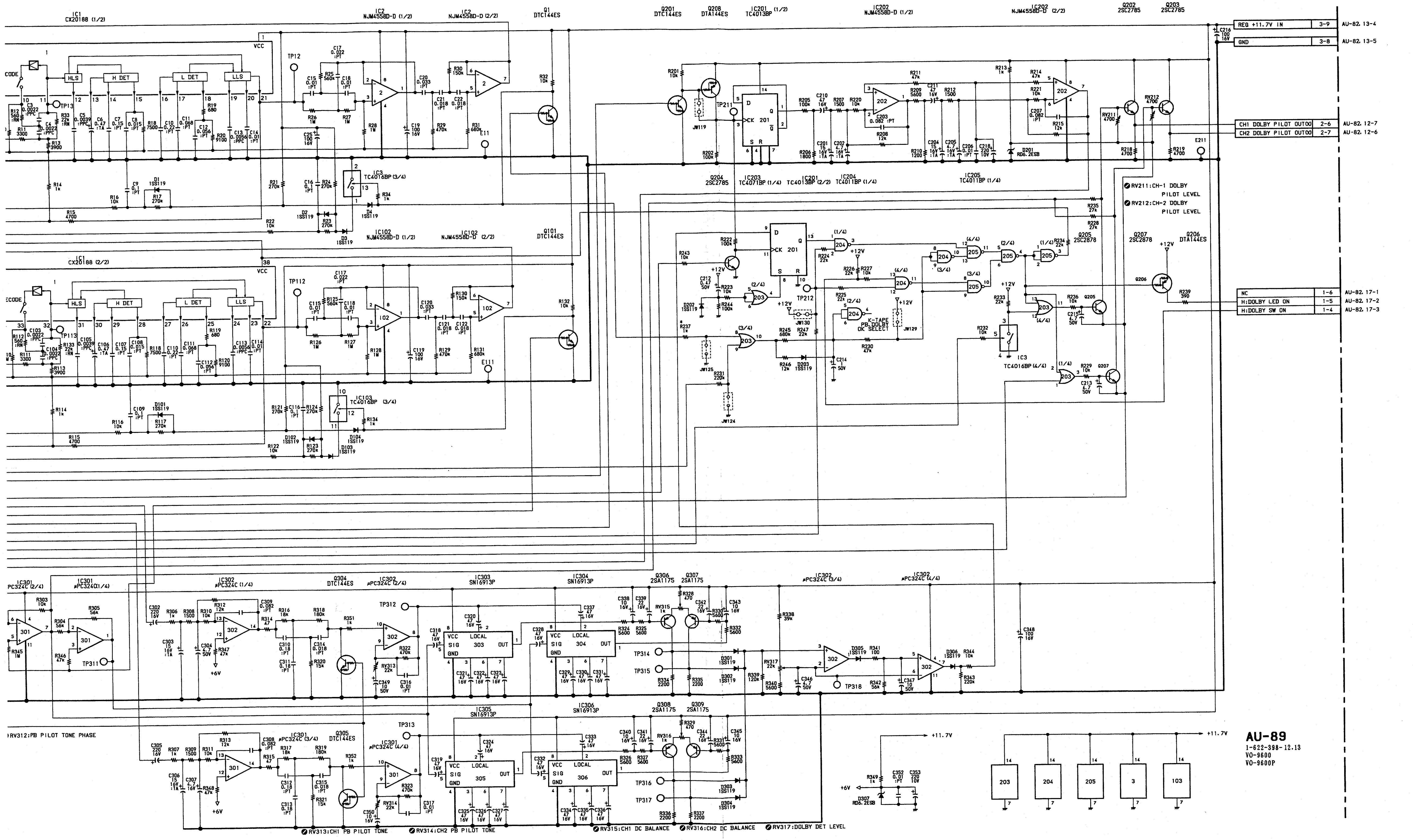
-COMPONENT SIDE-

1-622-398-12
VO-9600
VO-9600P

AU-89:DOLBY

EK;S/N 10001 and higher


AU-82. 12-11 2-2 CH1 REC SIG OUT
AU-82. 12-12 2-1 CH1 REC SIG OUT (G)
AU-82. 12-9 2-4 CH1 DOLBY SIG IN
AU-82. 12-10 2-3 CH1 DOLBY SIG OUT (Y)
AU-82. 12-8 2-5 CH1 DOLBY SIG (G)
AU-82. 12-2 2-11 CH2 REC SIG OUT
AU-82. 12-1 2-12 CH2 REC SIG OUT (G)
AU-82. 12-4 2-9 CH2 DOLBY SIG IN
AU-82. 12-3 2-10 CH2 DOLBY SIG OUT (Y)
AU-82. 12-5 2-8 CH2 DOLBY SIG (G)
AU-82. 17-4 1-3 CTL IN
AU-82. 17-5 1-2 CTL IN (G)
AU-82. 17-6 1-1 L:SERVO LOCK ON IN
AU-82. 13-7 3-6 CH1 DOLBY DET IN
AU-82. 13-8 3-5 CH1 DOLBY DET IN (G)
AU-82. 13-9 3-4 CH2 DOLBY DET IN
AU-82. 13-10 3-3 CH2 DOLBY DET IN (G)
AU-82. 13-6 3-7 H:SP IN
AU-82. 13-3 3-10 H:CH1 REC IN
AU-82. 13-2 3-11 L:CH2 EE IN
AU-82. 13-1 3-12 L:CH1 EE IN
AU-82. 13-12 3-1 H:CH2 REC IN
AU-82. 13-11 3-2 H:VIDEO MUTE IN
IC1 CX20188 (1/2)
IC1 CX20188 (2/2)
IC2 NJM4558D-D (1/2)
IC2 NJM4558D-D (2/2)
IC102 NJM4558D-D (1/2)
IC102 NJM4558D-D (2/2)
Q1 DTC144ES
Q101 DTC144ES
Q201 DTC144ES
Q208 DTA144ES
Q204 2SC2765
IC203 TC4071BP
CP1
CP101
MODE CTRL
REF
LINE
CAL
PB
MOA
DECODE
HLS
H DET
L DET
LLS
VCC
GND
TP11
TP12
TP13
TP111
TP112
TP113
TP211
IC3 TC4016BP (1/4)
IC3 TC4016BP (2/4)
IC3 TC4016BP (3/4)
IC103 TC4016BP (1/4)
IC103 TC4016BP (2/4)
IC103 TC4016BP (3/4)
IC103 TC4016BP (4/4)
RV11:CH-1 EE LINE OUT LEVEL
RV111:CH-2 EE LINE OUT LEVEL
Q301 DTC144ES
Q302 DTC144ES
Q303 DTC144ES
IC301 μPC324C (2/4)
IC301 μPC324C (1/4)
IC301 μPC324C (3/4)
IC301 μPC324C (4/4)
IC302 μPC324C (1/4)
IC302 μPC324C (2/4)
Q304 DTC144ES
Q305 DTC144ES
IC303 SN16913P
IC304 SN16913P
IC305 SN16913P
IC306 SN16913P
Q306 2SA1175
Q307 2SA1175
Q308 2SA1175
Q309 2SA1175
VCC LOCAL SIG OUT GND
TP311
TP312
TP313
TP314
TP315
TP316
TP317
+12V
+6V
RV311:REC PILOT TONE PHASE
RV312:PB PILOT TONE PHASE
RV313:CH1 PB PILOT TONE
RV314:CH2 PB PILOT TONE
RV315:CH1 DC BALANCE
RV316:CH2 DC BALANCE

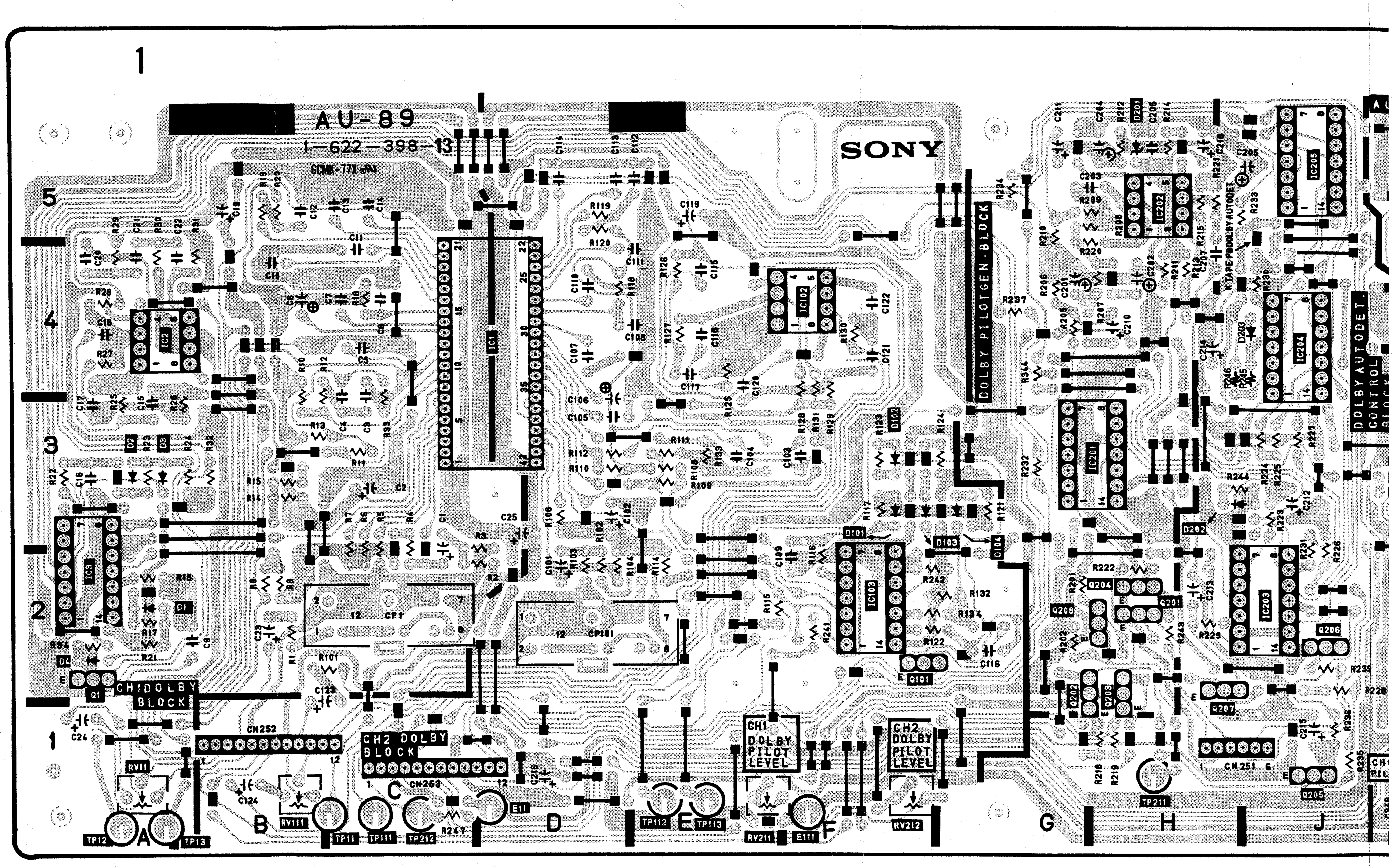

IC1 CX20188 (1/2)
IC2 NJM4558D-D (1/2)
IC2 NJM4558D-D (2/2)
Q1 DTC144ES
Q201 DTC144ES
Q208 DTA144ES
IC201 TC4013BP (1/2)
IC202 NJM4558D-D (1/2)
IC202 NJM4558D-D (2/2)
Q202 2SC2785
Q203 2SC2785
REG +11.7V IN
GND
AU-82, 13-4
AU-82, 13-5
CH1 DOLBY PILOT OUT
CH2 DOLBY PILOT OUT
AU-82, 12-7
AU-82, 12-6
CODE
HLS
H DET
L DET
LLS
VCC
TP12
TP13
E11
IC3 TC4016BP (3/4)
Q204 2SC2785
IC203 TC4071BP (1/4)
IC201 TC4013BP (2/2)
IC204 TC4011BP (1/4)
IC205 TC4011BP (1/4)
RV211: CH-1 DOLBY PILOT LEVEL
RV212: CH-2 DOLBY PILOT LEVEL
Q205 2SC2878
Q207 2SC2878
Q206 DTA144ES
IC1 CX20188 (2/2)
IC102 NJM4558D-D (1/2)
IC102 NJM4558D-D (2/2)
Q101 DTC144ES
TP112
TP113
E111
TP211
TP212
JW119
JW124
JW125
JW129
JW130
K-TAPE PB DOLBY OK SELECT
IC103 TC4016BP (3/4)
IC3 TC4016BP (4/4)
NC
H:DOLBY LED ON
H:DOLBY SW ON
AU-82, 17-1
AU-82, 17-2
AU-82, 17-3
IC301 μPC324C (2/4)
IC301 μPC324C (1/4)
IC302 μPC324C (1/4)
Q304 DTC144ES
IC302 μPC324C (2/4)
IC303 SN16913P
IC304 SN16913P
Q306 2SA1175
Q307 2SA1175
IC302 μPC324C (3/4)
IC302 μPC324C (4/4)
TP311
TP312
TP314
TP315
TP318
VCC LOCAL SIG OUT GND
RV312: PB PILOT TONE PHASE
IC301 μPC324C (3/4)
Q305 DTC144ES
IC301 μPC324C (4/4)
IC305 SN16913P
IC306 SN16913P
Q308 2SA1175
Q309 2SA1175
TP313
TP316
TP317
RV313: CH1 PB PILOT TONE
RV314: CH2 PB PILOT TONE
RV315: CH1 DC BALANCE
RV316: CH2 DC BALANCE
RV317: DOLBY DET LEVEL
+11.7V
+6V
D307 RD6.2ESB
203
204
205
3
103

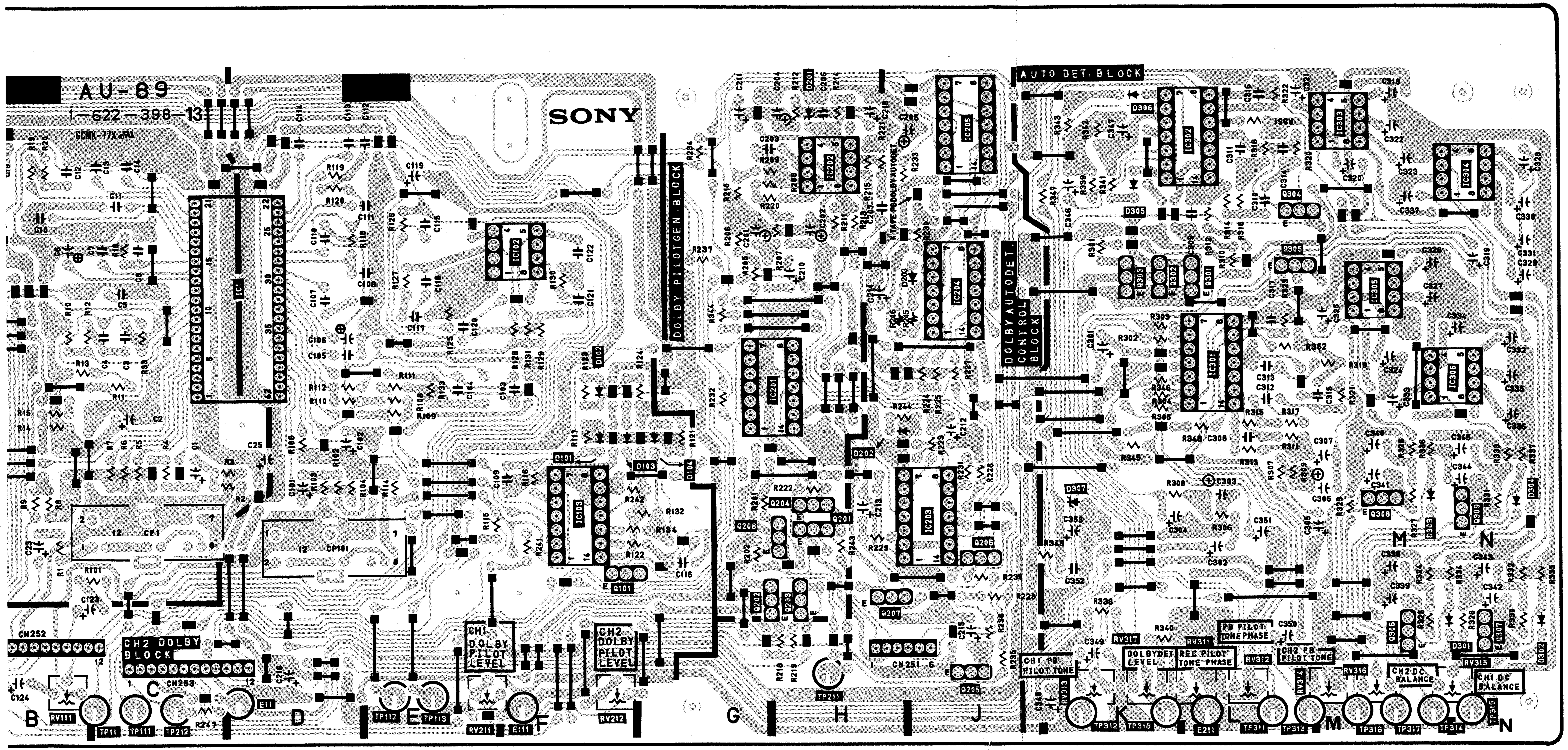
AU-89
1-622-398-12.13
VO-9600
VO-9600P

AU-89:DOLBY
EK;S/N 10401 and higher

AU-89 (1-622-398-13)

CN251	H-1
CN252	B-1
CN253	C-1
CP1	C-2
CP101	D-2
D1	A-2
D2	A-3
D3	A-3
D4	A-2
D101	F-3
D102	F-3
D103	F-3
D104	G-3
D201	H-5
D202	H-3
D203	J-4
D301	N-1
D302	N-1
D303	M-2
D304	N-2
D305	K-5
D306	K-5
D307	K-2
E11	D-1
E111	F-1
E211	L-1
IC1	D-4
IC2	A-4
IC3	A-2
IC102	F-4
IC103	F-2
IC201	H-3
IC202	H-5
IC203	J-2
IC204	J-4
IC205	J-1
IC301	L-3
IC302	L-5
IC303	M-5
IC304	N-5
IC305	M-4
IC306	N-3
Q1	A-2
Q101	F-2
Q201	H-2
Q202	H-2
Q203	H-2
Q204	H-2
Q205	J-1
Q206	J-2
Q207	H-2
Q208	H-2
Q301	L-4
Q302	K-4
Q303	K-4
Q304	L-4
Q305	L-4
Q306	M-1
Q307	N-1
Q308	M-2
Q309	N-2
RV11	A-1
RV111	B-1
RV211	E-1
RV212	F-1
RV311	L-1
RV312	L-1
RV313	K-1
RV314	M-1
RV315	N-1
RV316	M-1
RV317	K-1
TP11	C-1
TP12	A-1
TP13	A-1
TP111	C-1
TP112	E-1
TP113	E-1
TP211	H-1
TP212	C-1
TP311	L-1
TP312	K-1
TP313	L-1
TP314	M-1
TP315	N-1
TP316	M-1
TP317	M-1
TP318	K-1


1
2
3
4
5
AU-89
1-622-398-13
SONY
DOLBY PILOTGEN BLOCK
DOLBY AUTODET. CONTROL BLOCK
CH1DOLBY BLOCK
CH2 DOLBY BLOCK
CH1 DOLBY PILOT LEVEL
CH2 DOLBY PILOT LEVEL
CN252
CN253
CN251
CP1
CP101
IC1
IC2
IC3
IC102
IC103
IC201
IC202
IC203
IC204
IC205
RV11
RV111
RV211
RV212
TP12
TP13
TP11
TP111
TP212
TP112
TP113
TP211
E11
E111
A
B
C
D
E
F
G
H
J

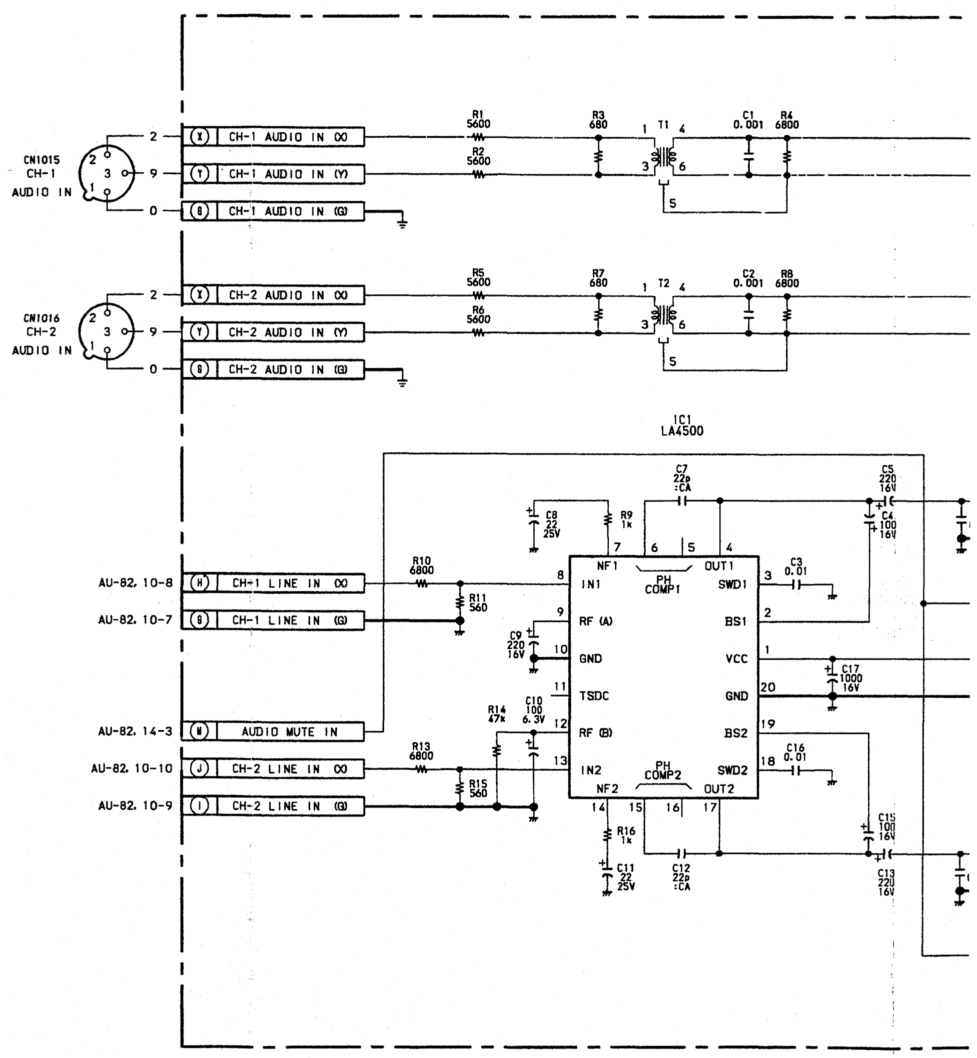

AU-89
1-622-398-13
GCMK-77X
SONY
DOLBY PILOTGEN BLOCK
AUTO DET. BLOCK
DOLBY AUTODET. CONTROL BLOCK
CH2 DOLBY BLOCK
CH1 DOLBY PILOT LEVEL
CH2 DOLBY PILOT LEVEL
CH1 PB PILOT TONE
DOLBYDET LEVEL
REC PILOT TONE PHASE
PB PILOT TONE PHASE
CH2 PB PILOT TONE
CH2 DC BALANCE
CH1 DC BALANCE
IC1
IC102
IC103
IC201
IC202
IC203
IC204
IC205
IC301
IC302
IC303
IC304
IC305
IC306
CP1
CP101
CN252
CN253
CN251
RV111
RV211
RV212
RV311
RV312
RV313
RV314
RV315
RV316
RV317
TP11
TP111
TP112
TP113
TP211
TP212
TP311
TP312
TP313
TP314
TP315
TP316
TP317
TP318
E11
E111
E211
B
C
D
E
F
G
H
J
K
L
M
N

AU -89

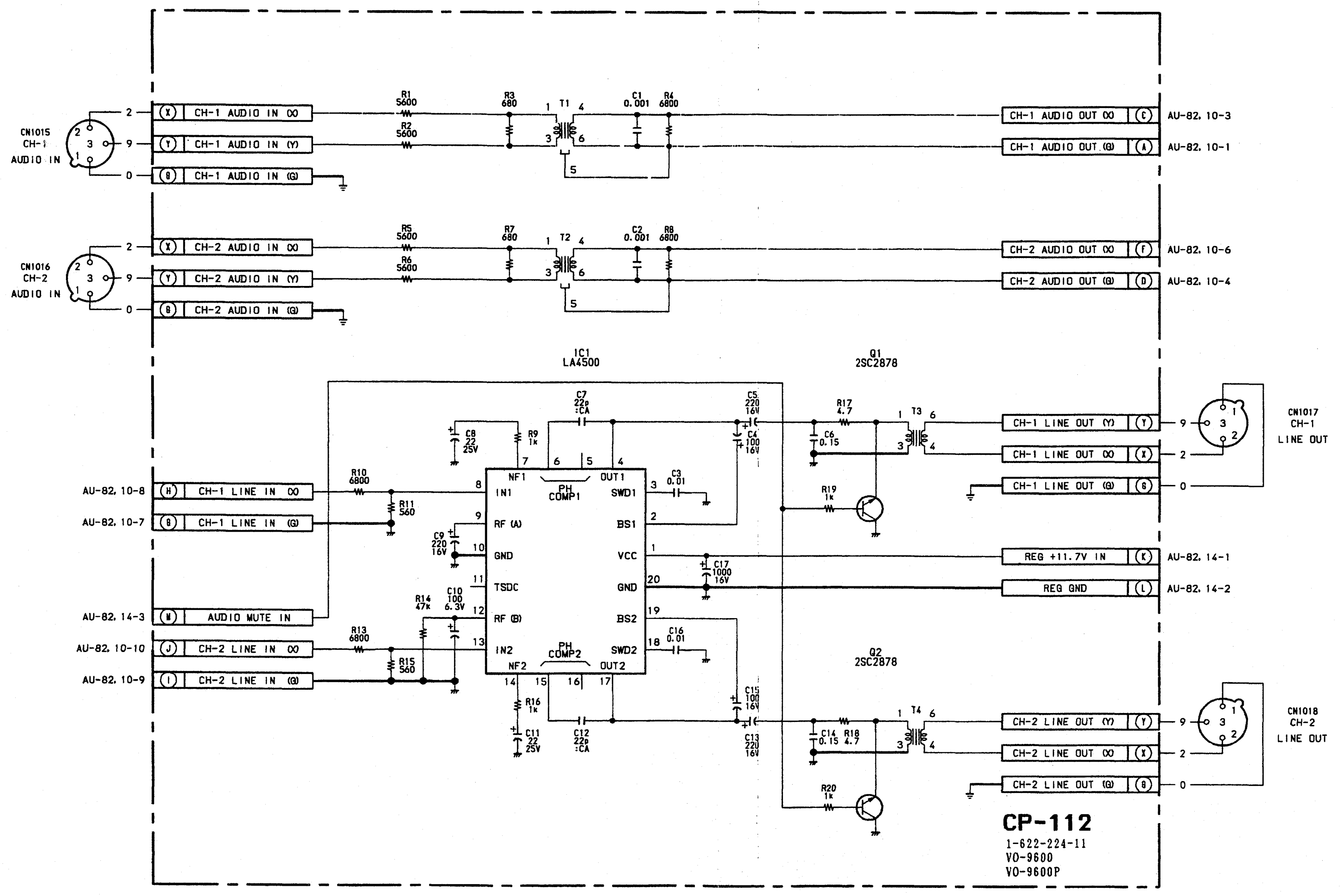
-SOLDERING SIDE-

1-622-398-13
VO-9600
VO-9600P

CP-112;OUTPUT AMPLIFIER


CN1015
CH-1
AUDIO IN
CN1016
CH-2
AUDIO IN
(X) CH-1 AUDIO IN (X)
(Y) CH-1 AUDIO IN (Y)
(G) CH-1 AUDIO IN (G)
(X) CH-2 AUDIO IN (X)
(Y) CH-2 AUDIO IN (Y)
(G) CH-2 AUDIO IN (G)
R1 5600
R2 5600
R3 680
T1
C1 0.001
R4 6800
R5 5600
R6 5600
R7 680
T2
C2 0.001
R8 6800
IC1
LA4500
AU-82, 10-8
AU-82, 10-7
AU-82, 14-3
AU-82, 10-10
AU-82, 10-9
(H) CH-1 LINE IN (X)
(G) CH-1 LINE IN (G)
(M) AUDIO MUTE IN
(J) CH-2 LINE IN (X)
(I) CH-2 LINE IN (G)
R10 6800
R11 560
R13 6800
R14 47k
R15 560
R9 1k
R16 1k
C7 22p :CA
C8 22 25V
C9 220 16V
C10 100 6.3V
C11 22 25V
C12 22p :CA
C3 0.01
C16 0.01
C17 1000 16V
C5 220 16V
C4 100 16V
C15 100 16V
C13 220 16V
NF1
IN1
RF (A)
GND
TSDC
RF (B)
IN2
NF2
PH COMP1
PH COMP2
OUT1
SWD1
BS1
VCC
GND
BS2
SWD2
OUT2

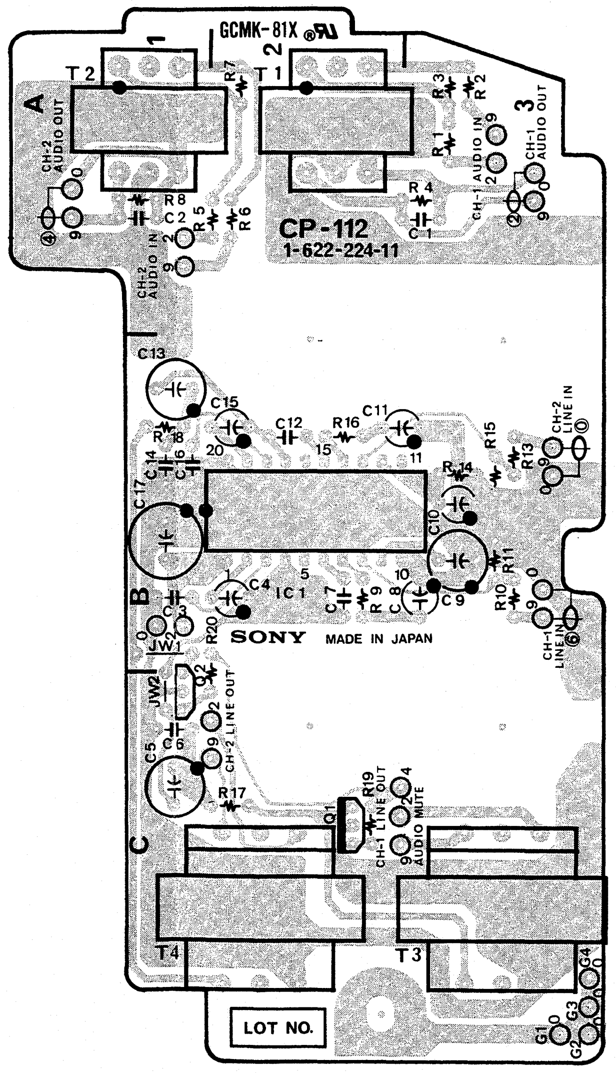
CP-112;OUTPUT AMPLIFIER


CN1015
CH-1
AUDIO IN
CH-1 AUDIO IN (X)
CH-1 AUDIO IN (Y)
CH-1 AUDIO IN (G)
CN1016
CH-2
AUDIO IN
CH-2 AUDIO IN (X)
CH-2 AUDIO IN (Y)
CH-2 AUDIO IN (G)
R1 5600
R2 5600
R3 680
T1
C1 0.001
R4 6800
R5 5600
R6 5600
R7 680
T2
C2 0.001
R8 6800
CH-1 AUDIO OUT (X)
AU-82, 10-3
CH-1 AUDIO OUT (G)
AU-82, 10-1
CH-2 AUDIO OUT (X)
AU-82, 10-6
CH-2 AUDIO OUT (G)
AU-82, 10-4
IC1
LA4500
NF1
IN1
RF (A)
GND
TSDC
RF (B)
IN2
NF2
PH COMP1
PH COMP2
OUT1
SWD1
BS1
VCC
GND
BS2
SWD2
OUT2
AU-82, 10-8
CH-1 LINE IN (X)
AU-82, 10-7
CH-1 LINE IN (G)
AU-82, 14-3
AUDIO MUTE IN
AU-82, 10-10
CH-2 LINE IN (X)
AU-82, 10-9
CH-2 LINE IN (G)
R10 6800
R11 560
R13 6800
R15 560
R14 47k
C10 100 6.3V
C8 22 25V
R9 1k
C9 220 16V
C7 22p :CA
C3 0.01
C17 1000 16V
C16 0.01
R16 1k
C11 22 25V
C12 22p :CA
C5 220 16V
C4 100 16V
C15 100 16V
C13 220 16V
Q1
2SC2878
R17 4.7
C6 0.15
T3
R19 1k
Q2
2SC2878
C14 0.15
R18 4.7
T4
R20 1k
CH-1 LINE OUT (Y)
CH-1 LINE OUT (X)
CH-1 LINE OUT (G)
CN1017
CH-1
LINE OUT
REG +11.7V IN
AU-82, 14-1
REG GND
AU-82, 14-2
CH-2 LINE OUT (Y)
CH-2 LINE OUT (X)
CH-2 LINE OUT (G)
CN1018
CH-2
LINE OUT
CP-112
1-622-224-11
VO-9600
VO-9600P

CP-112:OUTPUT AMPLIFIER

CP-112 (1-622-224-11)

IC1	B-2
Q1	C-2
Q2	C-1
T1	A-2
T2	A-1
T3	C-3
T4	C-2


GCMK-81X
A
B
C
1
2
3
T2
T1
T3
T4
R7
R3
R2
R1
R4
C1
R8
C2
R5
R6
CH-2 AUDIO OUT
CH-1 AUDIO IN
CH-1 AUDIO OUT
CH-2 AUDIO IN
CP-112
1-622-224-11
C13
C15
C12
R16
C11
R18
C14
C16
C17
R14
R15
R13
CH-2 LINE IN
C10
R11
C4
IC1
C7
R9
C8
C9
R10
C3
R20
JW1
JW2
CH-1 LINE IN
SONY
MADE IN JAPAN
CH-2 LINE OUT
C5
C6
R17
Q1
R19
CH-1 LINE OUT
AUDIO MUTE
G1
G2
G3
G4
LOT NO.

CP-112

-COMPONENT SIDE-

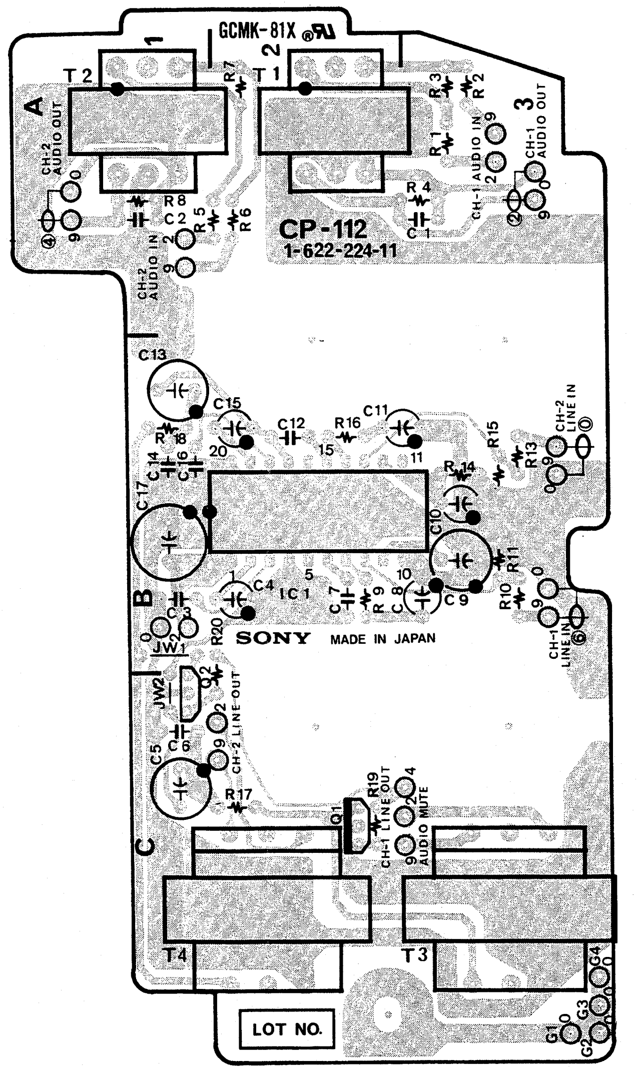
1-622-224-11
VO-9600
VO-9600P

112 (1-622-224-11)

B-2

C-2
C-1

A-2
A-1
C-3
C-2

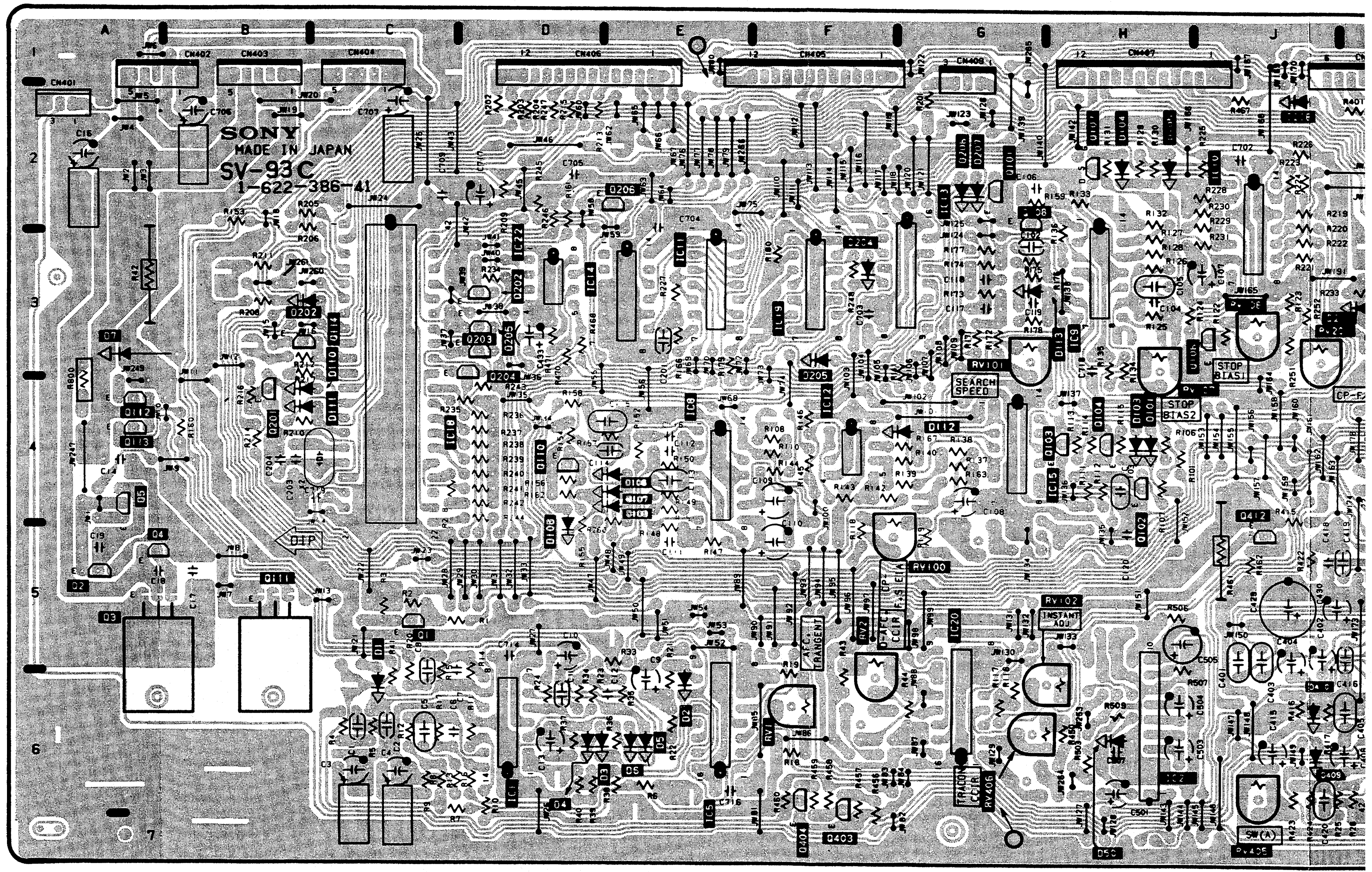

GCMK-81X
T 2
T 1
1
2
3
A
B
C
R 7
R 3
R 2
R 1
R 4
R 8
R 5
R 6
C 2
C 1
CH-2 AUDIO OUT
CH-1 AUDIO OUT
CH-1 AUDIO IN
CH-2 AUDIO IN
CP-112
1-622-224-11
C13
C15
C12
R16
C11
R15
R 18
C14
R 16
20
15
11
R 14
R13
CH-2 LINE IN
C17
C10
R11
C4
IC1
5
10
C 7
R 9
C 8
C 9
R10
CH-1 LINE IN
C 3
R20
JW1
JW2
SONY
MADE IN JAPAN
C5
C6
CH-2 LINE OUT
R17
Q1
R19
CH-1 LINE OUT
AUDIO MUTE
T4
T3
G1
G2
G3
G4
LOT NO.

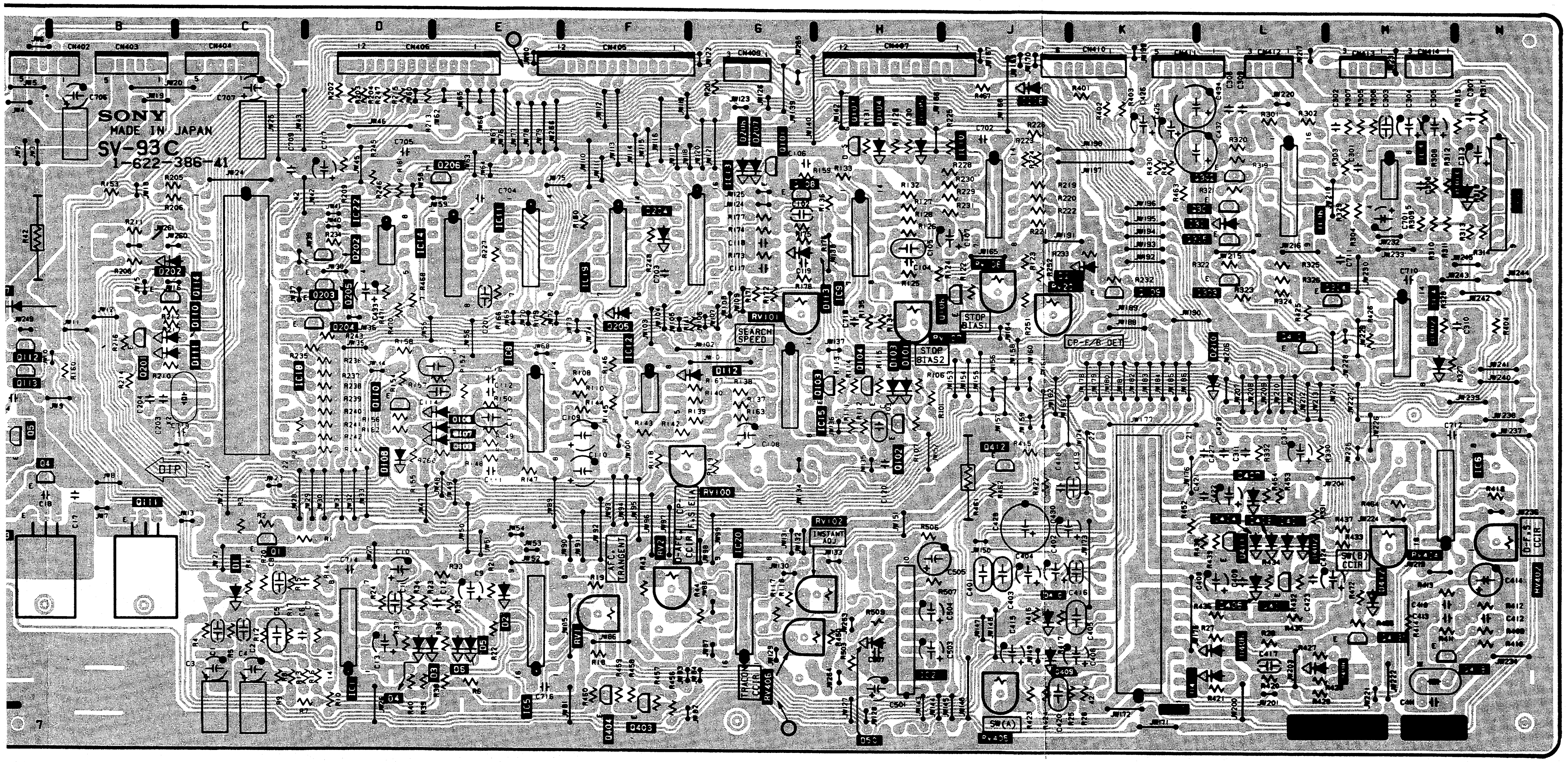
CP-112
-COMPONENT SIDE-
1-622-224-11
VO-9600
VO-9600P

SV-93C;SERVO SYSTEM
EK;S/N 10001 thru 10400

SV-93C (1-622-386-41)

CN401	A-2
CN402	A-1
CN403	B-1
CN404	C-1
CN405	F-1
CN406	D-1
CN407	H-1
CN409	G-1
CN410	K-1
CN411	K-1
CN412	L-1
CN413	M-1
CN414	M-1
D1	C-6
D2	E-6
D3	E-6
D4	E-6
D5	E-6
D6	D-6
D7	A-3
D101	H-4
D103	H-4
D104	H-2
D105	H-2
D106	E-4
D107	E-4
D108	D-5
D109	E-4
D110	B-4
D111	B-4
D112	G-4
D113	G-3
D202	B-3
D204	F-3
D205	F-3
D206	G-2
D207	G-2
D208	J-2
D210	L-4
D211	K-3
D301	L-3
D302	M-4
D303	N-2
D401	L-5
D402	L-5
D403	L-5
D404	L-5
D405	L-5
D406	L-6
D407	L-5
D408	L-6
D409	J-6
D410	J-6
D411	L-6
D412	M-6
D501	H-6
IC1	D-6
IC2	N-2
IC3	M-2
IC4	M-3
IC5	E-6
IC6	M-5
IC8	E-4
IC9	H-3
IC10	J-2
IC11	E-3
IC12	F-4
IC13	G-3
IC14	E-3
IC15	G-4
IC16	L-2
IC17	K-5
IC18	C-3
IC19	F-3
IC20	G-6
IC21	H-6
IC22	D-3
Q1	C-5
Q2	A-5
Q3	A-5
Q4	A-5
Q5	A-4
Q101	G-2
Q102	H-4
Q103	H-4
Q104	H-4
Q106	J-3
Q107	H-2
Q108	G-2
Q109	K-3
Q110	D-4
Q111	B-5
Q112	A-4
Q113	A-4
Q114	B-3
Q201	B-4
Q202	D-3
Q203	D-3
Q204	D-3
Q205	D-3
Q206	E-2
Q301	L-3
Q302	L-2
Q303	L-3
Q304	M-3
Q305	L-3
Q401	L-5
Q403	F-6
Q404	F-6
Q408	M-6
Q411	L-5
Q412	J-5
Q413	M-6
RV1	F-6
RV2	F-6
RV100	F-5
RV101	G-3
RV102	H-6
RV106	J-3
RV107	H-3
RV201	J-3
RV402	N-5
RV404	M-5
RV405	J-6
RV406	G-6
X1	M-6
X2	C-4


SONY
MADE IN JAPAN
SV-93C
1-622-386-41
A
B
C
D
E
F
G
H
J
1
2
3
4
5
6
7
CN401
CN402
CN403
CN404
CN406
CN405
CN409
CN407
DIP
SEARCH SPEED
STOP BIAS1
STOP BIAS2
INSTANT ADJ
RV101
RV100
RV102
RV406
RV405

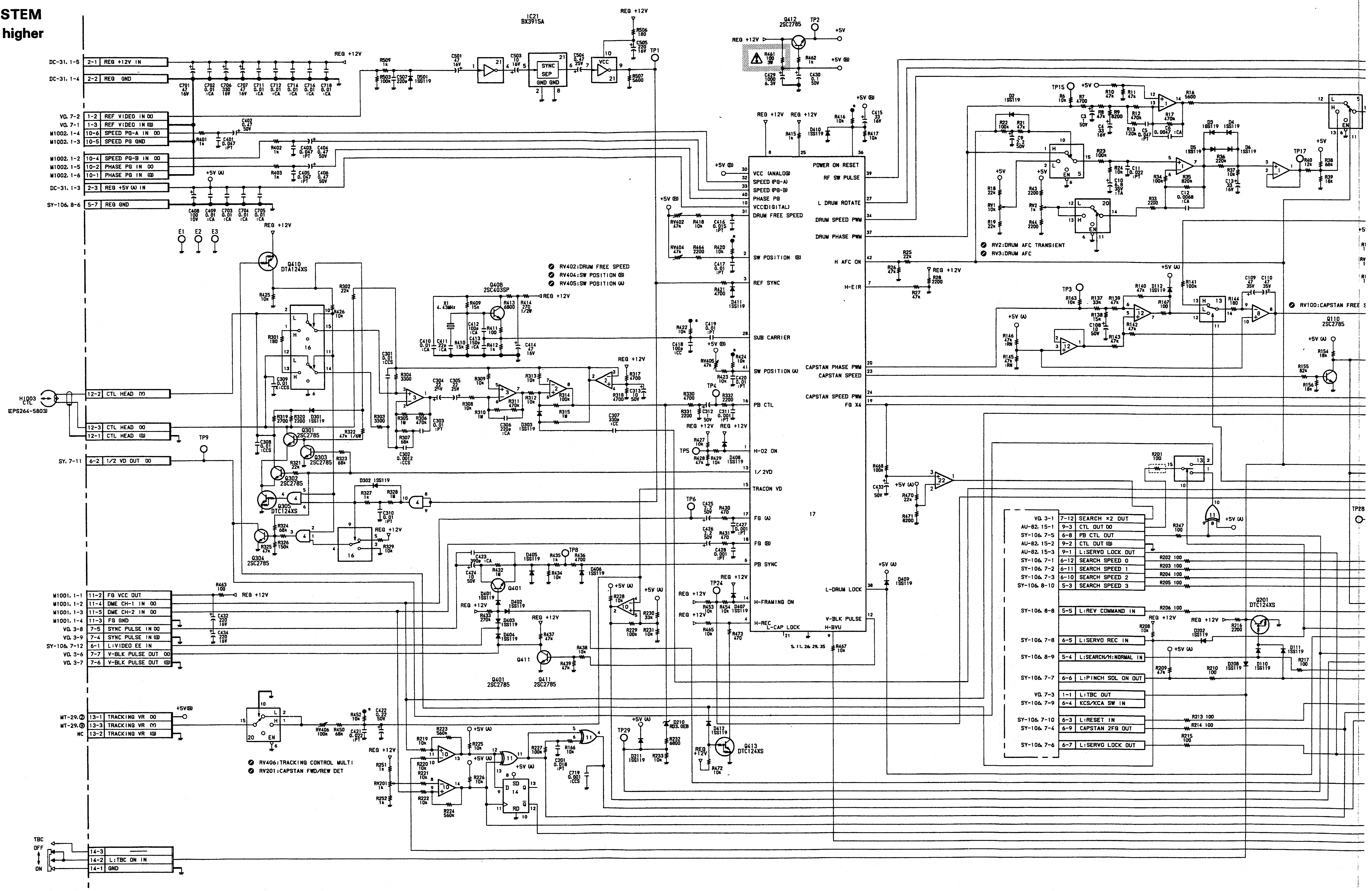

SONY
MADE IN JAPAN
SV-93C
1-622-386-41
SEARCH SPEED
STOP BIAS1
STOP BIAS2
CP-F/B DET
INSTANT ADJ
DIP

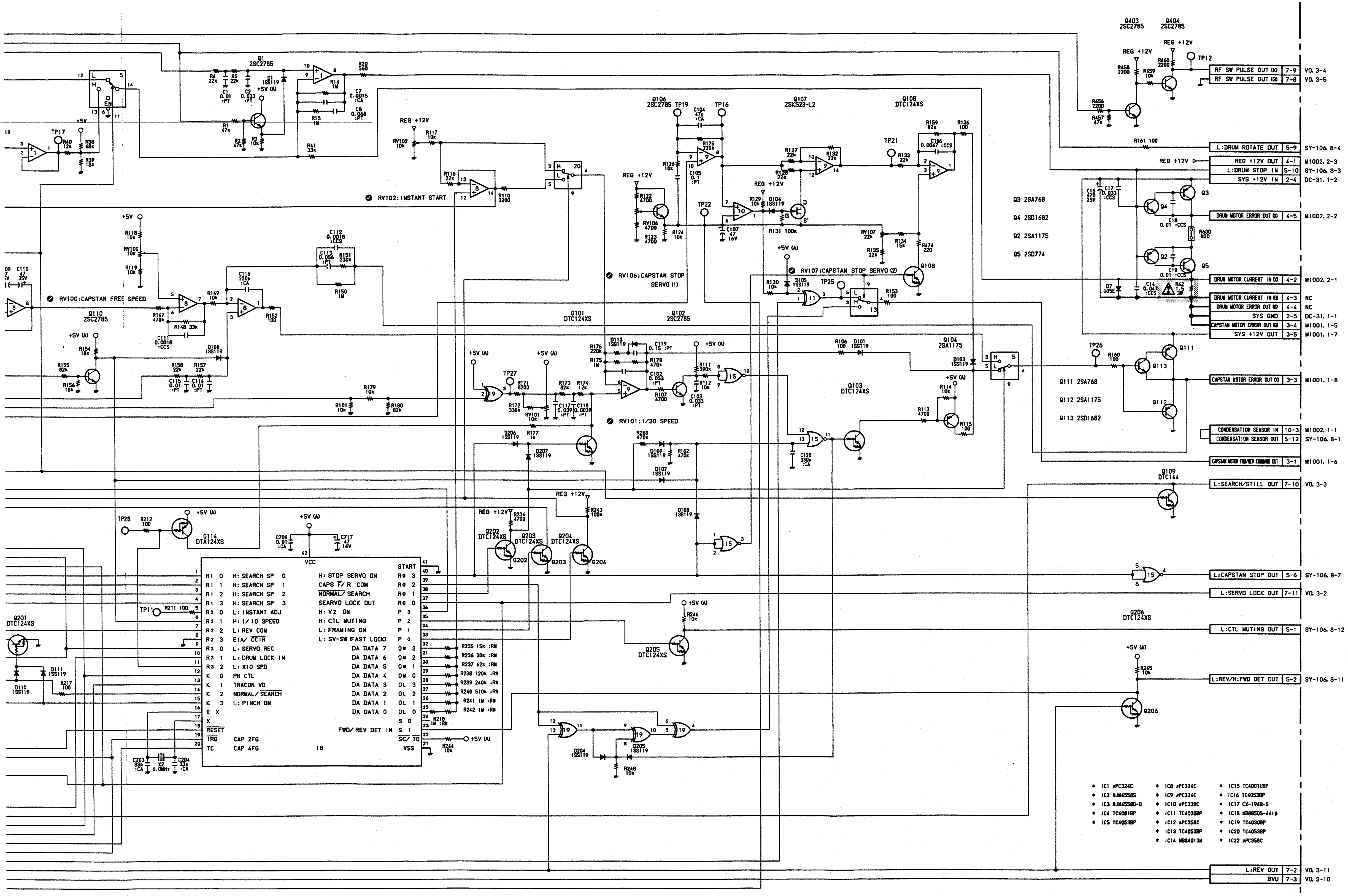
SV-93C

-COMPONENT SIDE-

1-622-386-41
VO-9600P

SV-93C:SERVO SYSTEM
EK;S/N 10001 and higher


DC-31, 1-5 2-1 REG +12V IN
DC-31, 1-4 2-2 REG GND
VG 7-2 1-2 REF VIDEO IN (X)
VG 7-1 1-3 REF VIDEO IN (G)
M1002, 1-4 10-6 SPEED PG-A IN (X)
M1002, 1-3 10-5 SPEED PG GND
M1002, 1-2 10-4 SPEED PG-B IN (X)
M1002, 1-5 10-2 PHASE PG IN (X)
M1002, 1-6 10-1 PHASE PG IN (G)
DC-31, 1-3 2-3 REG +5V (A) IN
SY-106, 8-6 5-7 REG GND
IC21 BX3915A
SYNC SEP
VCC
H1003 CTL
12-2 CTL HEAD (Y)
12-3 CTL HEAD (X)
12-1 CTL HEAD (G)
SY, 7-11 6-2 1/2 VD OUT (X)
M1001, 1-1 11-2 FG VCC OUT
M1001, 1-2 11-4 DME CH-1 IN (X)
M1001, 1-3 11-5 DME CH-2 IN (X)
M1001, 1-4 11-3 FG GND
VG 3-8 7-5 SYNC PULSE IN (X)
VG 3-9 7-4 SYNC PULSE IN (G)
SY-106, 7-12 6-1 L:VIDEO EE IN
VG 3-6 7-7 V-BLK PULSE OUT (X)
VG 3-7 7-6 V-BLK PULSE OUT (G)
MT-29,② 13-1 TRACKING VR (X)
MT-29,① 13-3 TRACKING VR (Y)
NC 13-2 TRACKING VR (G)
TBC OFF ON
14-3
14-2 L:TBC ON IN
14-1 GND
RV402:DRUM FREE SPEED
RV404:SW POSITION (B)
RV405:SW POSITION (A)
RV406:TRACKING CONTROL MULTI
RV201:CAPSTAN FWD/REW DET
RV2:DRUM AFC TRANSIENT
RV3:DRUM AFC
RV100:CAPSTAN FREE S
VCC (ANALOG)
SPEED (PG-A)
SPEED (PG-B)
PHASE PG
VCC(DIGITAL)
DRUM FREE SPEED
SW POSITION (B)
REF SYNC
SUB CARRIER
SW POSITION (A)
PB CTL
H-02 ON
1/2VD
TRACON VD
FG (A)
FG (B)
PB SYNC
H-FRAMING ON
H-REC
L-CAP LOCK
POWER ON RESET
RF SW PULSE
L DRUM ROTATE
DRUM SPEED PWM
DRUM PHASE PWM
H AFC ON
H-EIR
CAPSTAN PHASE PWM
CAPSTAN SPEED
CAPSTAN SPEED PWM
FG X4
L-DRUM LOCK
V-BLK PULSE
H-BYU
VG 3-1 7-12 SEARCH ×2 OUT
AU-82, 15-1 9-3 CTL OUT (X)
SY-106, 7-5 6-8 PB CTL OUT
AU-82, 15-2 9-2 CTL OUT (G)
AU-82, 15-3 9-1 L:SERVO LOCK OUT
SY-106, 7-1 6-12 SEARCH SPEED 0
SY-106, 7-2 6-11 SEARCH SPEED 1
SY-106, 7-3 6-10 SEARCH SPEED 2
SY-106, 8-10 5-3 SEARCH SPEED 3
SY-106, 8-8 5-5 L:REV COMMAND IN
SY-106, 7-8 6-5 L:SERVO REC IN
SY-106, 8-9 5-4 L:SEARCH/H:NORMAL IN
SY-106, 7-7 6-6 L:PINCH SOL ON OUT
VG 7-3 1-1 L:TBC OUT
SY-106, 7-9 6-4 KCS/KCA SW IN
SY-106, 7-10 6-3 L:RESET IN
SY-106, 7-4 6-9 CAPSTAN 2FG OUT
SY-106, 7-6 6-7 L:SERVO LOCK OUT

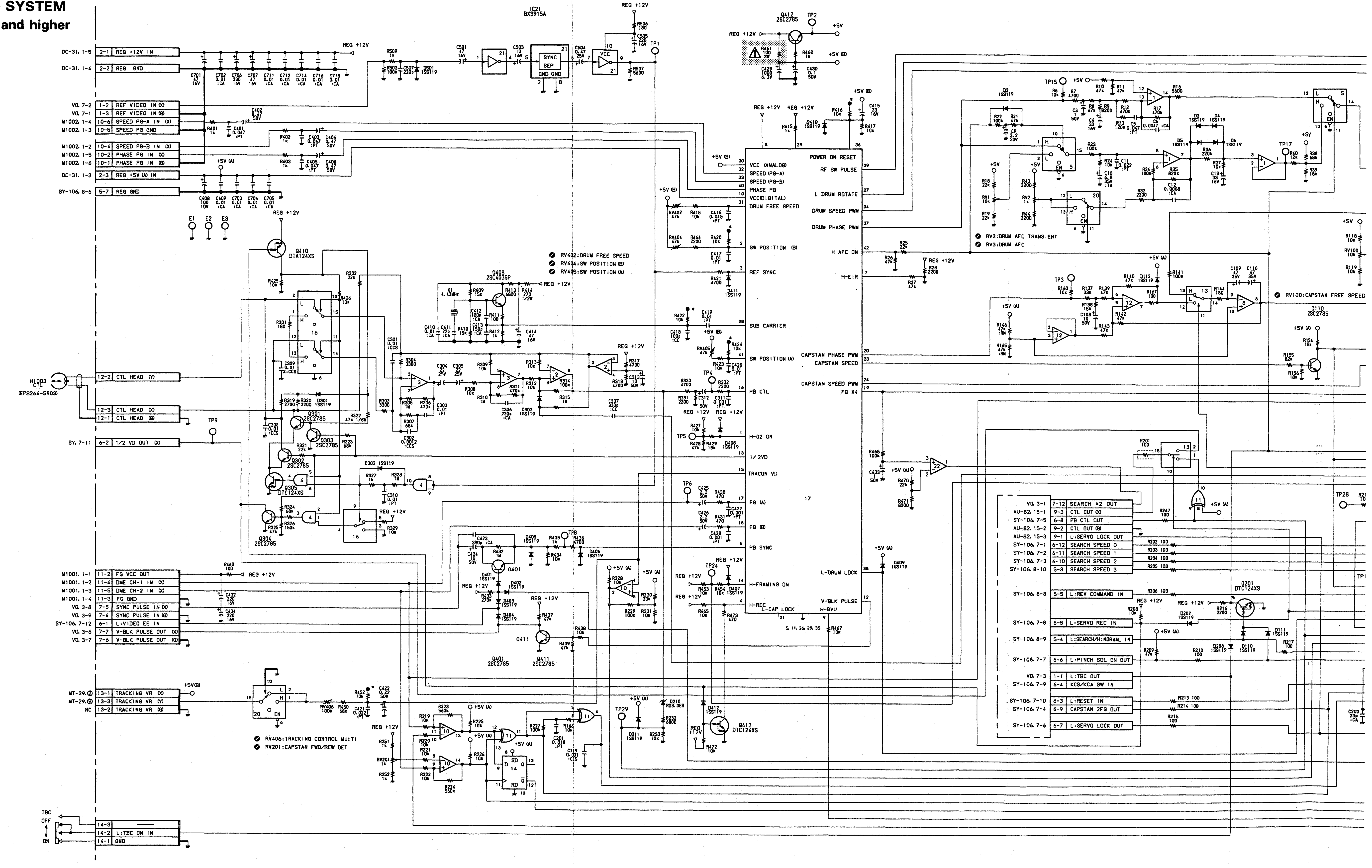

Q403 2SC2785
Q404 2SC2785
REG +12V
TP12
RF SW PULSE OUT (X) 7-9 VO. 3-4
RF SW PULSE OUT (G) 7-8 VO. 3-5
L:DRUM ROTATE OUT 5-9 SY-106, 8-4
REG +12V OUT 4-1 M1002, 2-3
L:DRUM STOP IN 5-10 SY-106, 8-3
SYS +12V IN 2-4 DC-31, 1-2
DRUM MOTOR ERROR OUT (X) 4-5 M1002, 2-2
DRUM MOTOR CURRENT IN (X) 4-2 M1002, 2-1
DRUM MOTOR CURRENT IN (G) 4-3 NC
DRUM MOTOR ERROR OUT (G) 4-4 NC
SYS GND 2-5 DC-31, 1-1
CAPSTAN MOTOR ERROR OUT (G) 3-4 M1001, 1-5
SYS +12V OUT 3-5 M1001, 1-7
CAPSTAN MOTOR ERROR OUT (X) 3-3 M1001, 1-8
CONDENSATION SENSOR IN 10-3 M1002, 1-1
CONDENSATION SENSOR OUT 5-12 SY-106, 8-1
CAPSTAN MOTOR FWD/REV COMMAND OUT 3-1 M1001, 1-6
L:SEARCH/STILL OUT 7-10 VO. 3-3
L:CAPSTAN STOP OUT 5-6 SY-106, 8-7
L:SERVO LOCK OUT 7-11 VO. 3-2
L:CTL MUTING OUT 5-1 SY-106, 8-12
L:REV/H:FWD DET OUT 5-2 SY-106, 8-11
L:REV OUT 7-2 VO. 3-11
BVU 7-3 VO. 3-10
Q3 2SA768
Q4 2SD1682
Q2 2SA1175
Q5 2SD774
Q111 2SA768
Q112 2SA1175
Q113 2SD1682
RV102:INSTANT START
RV100:CAPSTAN FREE SPEED
RV106:CAPSTAN STOP SERVO (1)
RV107:CAPSTAN STOP SERVO (2)
RV101:1/30 SPEED
Q106 2SC2785
Q107 2SK523-L2
Q108 DTC124XS
Q1 2SC2785
Q110 2SC2785
Q101 DTC124XS
Q102 2SC2785
Q104 2SA1175
Q103 DTC124XS
Q109 DTC144
Q114 DTA124XS
Q201 DTC124XS
Q202 DTC124XS
Q203 DTC124XS
Q204 DTC124XS
Q205 DTC124XS
Q206 DTC124XS
R600 N20
R42 1.5 3W
VCC
START
R1 0 H: SEARCH SP 0
R1 1 H: SEARCH SP 1
R1 2 H: SEARCH SP 2
R1 3 H: SEARCH SP 3
R2 0 L: INSTANT ADJ
R2 1 H: 1/10 SPEED
R2 2 L: REV COM
R2 3 EIA/ CCIR
R3 0 L: SERVO REC
R3 1 L: DRUM LOCK IN
R3 2 L: X10 SPD
K 0 PB CTL
K 1 TRACON VD
K 2 NORMAL/ SEARCH
K 3 L: PINCH ON
E X
X
RESET
IRQ CAP 2FG
TC CAP 4FG
H: STOP SERVO ON R0 3
CAPS F/ R COM R0 2
NORMAL/ SEARCH R0 1
SEARVO LOCK OUT R0 0
H: V2 ON P 3
H: CTL MUTING P 2
L: FRAMING ON P 1
L: SV-SW (FAST LOCK) P 0
DA DATA 7 OM 3
DA DATA 6 OM 2
DA DATA 5 OM 1
DA DATA 4 OM 0
DA DATA 3 OL 3
DA DATA 2 OL 2
DA DATA 1 OL 1
DA DATA 0 OL 0
S 0
FWD/ REV DET IN S 1
SC/ TO
VSS
18
R235 15k :RN
R236 30k :RN
R237 62k :RN
R238 120k :RN
R239 240k :RN
R240 510k :RN
R241 1M :RN
R242 1M :RN
R218 1M :RN
R244 10k
+5V (A)
* IC1 μPC324C
* IC2 NJM4558S
* IC3 NJM4558D-D
* IC4 TC4081BP
* IC5 TC4053BP
* IC8 μPC324C
* IC9 μPC324C
* IC10 μPC339C
* IC11 TC4030BP
* IC12 μPC358C
* IC13 TC4053BP
* IC14 MB84013M
* IC15 TC4001UBP
* IC16 TC4053BP
* IC17 CX-194B-5
* IC18 MB88505-441M
* IC19 TC4030BP
* IC20 TC4053BP
* IC22 μPC358C

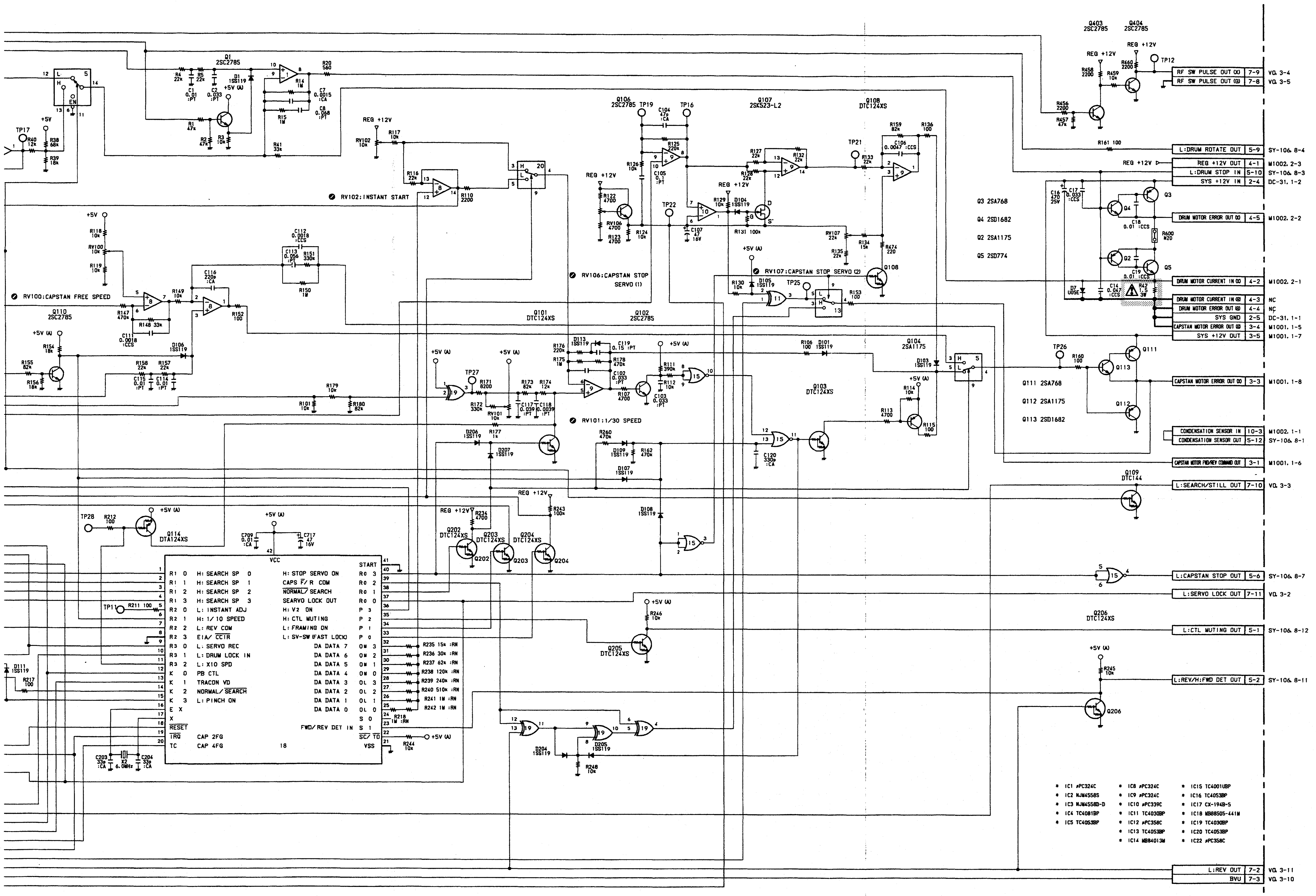
SV-93C
1-622-386-41,42,43
VO-9600P

NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

SV-93C;SERVO SYSTEM
EK;S/N 10001 and higher


IC21 BX3915A
SYNC SEP
GND GND
VCC
REG +12V
TP1
Q412 2SC2785
TP2
+5V
+5V (B)
DC-31, 1-5 2-1 REG +12V IN
DC-31, 1-4 2-2 REG GND
VO, 7-2 1-2 REF VIDEO IN (K)
VO, 7-1 1-3 REF VIDEO IN (G)
M1002, 1-4 10-6 SPEED PG-A IN (K)
M1002, 1-3 10-5 SPEED PG GND
M1002, 1-2 10-4 SPEED PG-B IN (K)
M1002, 1-5 10-2 PHASE PG IN (K)
M1002, 1-6 10-1 PHASE PG IN (G)
DC-31, 1-3 2-3 REG +5V (A) IN
SY-106, 8-6 5-7 REG GND
E1 E2 E3
Q410 DTA124XS
Q408 2SC403SP
X1 4.43MHz
RV402:DRUM FREE SPEED
RV404:SW POSITION (B)
RV405:SW POSITION (A)
H1003 CTL (EPS264-5803)
12-2 CTL HEAD (Y)
12-3 CTL HEAD (K)
12-1 CTL HEAD (G)
TP9
SY, 7-11 6-2 1/2 VD OUT (K)
Q301 2SC2785
Q302 2SC2785
Q303 2SC2785
Q305 DTC124XS
Q304 2SC2785
TP8
Q401
Q411
Q401 2SC2785
Q411 2SC2785
M1001, 1-1 11-2 FG VCC OUT
M1001, 1-2 11-4 DME CH-1 IN (K)
M1001, 1-3 11-5 DME CH-2 IN (K)
M1001, 1-4 11-3 FG GND
VO, 3-8 7-5 SYNC PULSE IN (K)
VO, 3-9 7-4 SYNC PULSE IN (G)
SY-106, 7-12 6-1 L:VIDEO EE IN
VO, 3-6 7-7 V-BLK PULSE OUT (K)
VO, 3-7 7-6 V-BLK PULSE OUT (G)
MT-29,② 13-2 TRACKING VR (K)
MT-29,⑤ 13-1 TRACKING VR (Y)
NC 13-2 TRACKING VR (G)
RV406:TRACKING CONTROL MULTI
RV201:CAPSTAN FWD/REW DET
TBC OFF ON
14-3
14-2 L:TBC ON IN
14-1 GND
VCC (ANALOG)
SPEED (PG-A)
SPEED (PG-B)
PHASE PG
VCC(DIGITAL)
DRUM FREE SPEED
SW POSITION (B)
REF SYNC
SUB CARRIER
SW POSITION (A)
PB CTL
H-02 ON
1/2VD
TRACON VD
FG (A)
FG (B)
PB SYNC
H-FRAMING ON
H-REC
L-CAP LOCK
POWER ON RESET
RF SW PULSE
L DRUM ROTATE
DRUM SPEED PWM
DRUM PHASE PWM
H AFC ON
H-EIR
CAPSTAN PHASE PWM
CAPSTAN SPEED
CAPSTAN SPEED PWM
FG X4
L-DRUM LOCK
V-BLK PULSE
H-BVU
TP4 TP5 TP6 TP24 TP29
Q413 DTC124XS
TP15 TP17 TP3
RV2:DRUM AFC TRANSIENT
RV3:DRUM AFC
RV100:CAPSTAN FREE SPEED
Q110 2SC2785
VO, 3-1 7-12 SEARCH ×2 OUT
AU-82, 15-1 9-3 CTL OUT (K)
SY-106, 7-5 6-8 PB CTL OUT
AU-82, 15-2 9-2 CTL OUT (G)
AU-82, 15-3 9-1 L:SERVO LOCK OUT
SY-106, 7-1 6-12 SEARCH SPEED 0
SY-106, 7-2 6-11 SEARCH SPEED 1
SY-106, 7-3 6-10 SEARCH SPEED 2
SY-106, 8-10 5-3 SEARCH SPEED 3
SY-106, 8-8 5-5 L:REV COMMAND IN
SY-106, 7-8 6-5 L:SERVO REC IN
SY-106, 8-9 5-4 L:SEARCH/H:NORMAL IN
SY-106, 7-7 6-6 L:PINCH SOL ON OUT
VO, 7-3 1-1 L:TBC OUT
SY-106, 7-4 6-4 KCS/KCA SW IN
SY-106, 7-10 6-3 L:RESET IN
SY-106, 7-4 6-9 CAPSTAN 2FG OUT
SY-106, 7-6 6-7 L:SERVO LOCK OUT
Q201 DTC124XS
TP28


RF SW PULSE OUT (X) 7-9 VO 3-4
RF SW PULSE OUT (O) 7-8 VO 3-5
L:DRUM ROTATE OUT 5-9 SY-106 8-4
REG +12V OUT 4-1 M1002 2-3
L:DRUM STOP IN 5-10 SY-106 8-3
SYS +12V IN 2-4 DC-31 1-2
DRUM MOTOR ERROR OUT (X) 4-5 M1002 2-2
DRUM MOTOR CURRENT IN (X) 4-2 M1002 2-1
DRUM MOTOR CURRENT IN (O) 4-3 NC
DRUM MOTOR ERROR OUT (O) 4-4 NC
SYS GND 2-5 DC-31 1-1
CAPSTAN MOTOR ERROR OUT (O) 3-4 M1001 1-5
SYS +12V OUT 3-5 M1001 1-7
CAPSTAN MOTOR ERROR OUT (X) 3-3 M1001 1-8
CONDENSATION SENSOR IN 10-3 M1002 1-1
CONDENSATION SENSOR OUT 5-12 SY-106 8-1
CAPSTAN MOTOR FWD/REV COMMAND OUT 3-1 M1001 1-6
L:SEARCH/STILL OUT 7-10 VO 3-3
L:CAPSTAN STOP OUT 5-6 SY-106 8-7
L:SERVO LOCK OUT 7-11 VO 3-2
L:CTL MUTING OUT 5-1 SY-106 8-12
L:REV/H:FWD DET OUT 5-2 SY-106 8-11
L:REV OUT 7-2 VO 3-11
BVU 7-3 VO 3-10
RV102:INSTANT START
RV100:CAPSTAN FREE SPEED
RV106:CAPSTAN STOP SERVO (1)
RV107:CAPSTAN STOP SERVO (2)
RV101:1/30 SPEED
Q3 2SA768
Q4 2SD1682
Q2 2SA1175
Q5 2SD774
Q111 2SA768
Q112 2SA1175
Q113 2SD1682
R1 0 H: SEARCH SP 0
R1 1 H: SEARCH SP 1
R1 2 H: SEARCH SP 2
R1 3 H: SEARCH SP 3
R2 0 L: INSTANT ADJ
R2 1 H: 1/10 SPEED
R2 2 L: REV COM
R2 3 EIA/CCIR
R3 0 L: SERVO REC
R3 1 L: DRUM LOCK IN
R3 2 L: X10 SPD
K 0 PB CTL
K 1 TRACON VD
K 2 NORMAL/SEARCH
K 3 L: PINCH ON
H: STOP SERVO ON
CAPS F/R COM
NORMAL/SEARCH
SEARVO LOCK OUT
H: V2 ON
H: CTL MUTING
L: FRAMING ON
L: SV-SW (FAST LOCK)
DA DATA 7
DA DATA 6
DA DATA 5
DA DATA 4
DA DATA 3
DA DATA 2
DA DATA 1
DA DATA 0
FWD/REV DET IN
CAP 2FG
CAP 4FG
* IC1 μPC324C
* IC2 NJM4558S
* IC3 NJM4558D-D
* IC4 TC4081BP
* IC5 TC4053BP
* IC8 μPC324C
* IC9 μPC324C
* IC10 μPC339C
* IC11 TC4030BP
* IC12 μPC358C
* IC13 TC4053BP
* IC14 MB84013M
* IC15 TC4001UBP
* IC16 TC4053BP
* IC17 CX-194B-S
* IC18 MB88505-441M
* IC19 TC4030BP
* IC20 TC4053BP
* IC22 μPC358C

SV-93C
1-622-386-41.42.43
VO-9600P

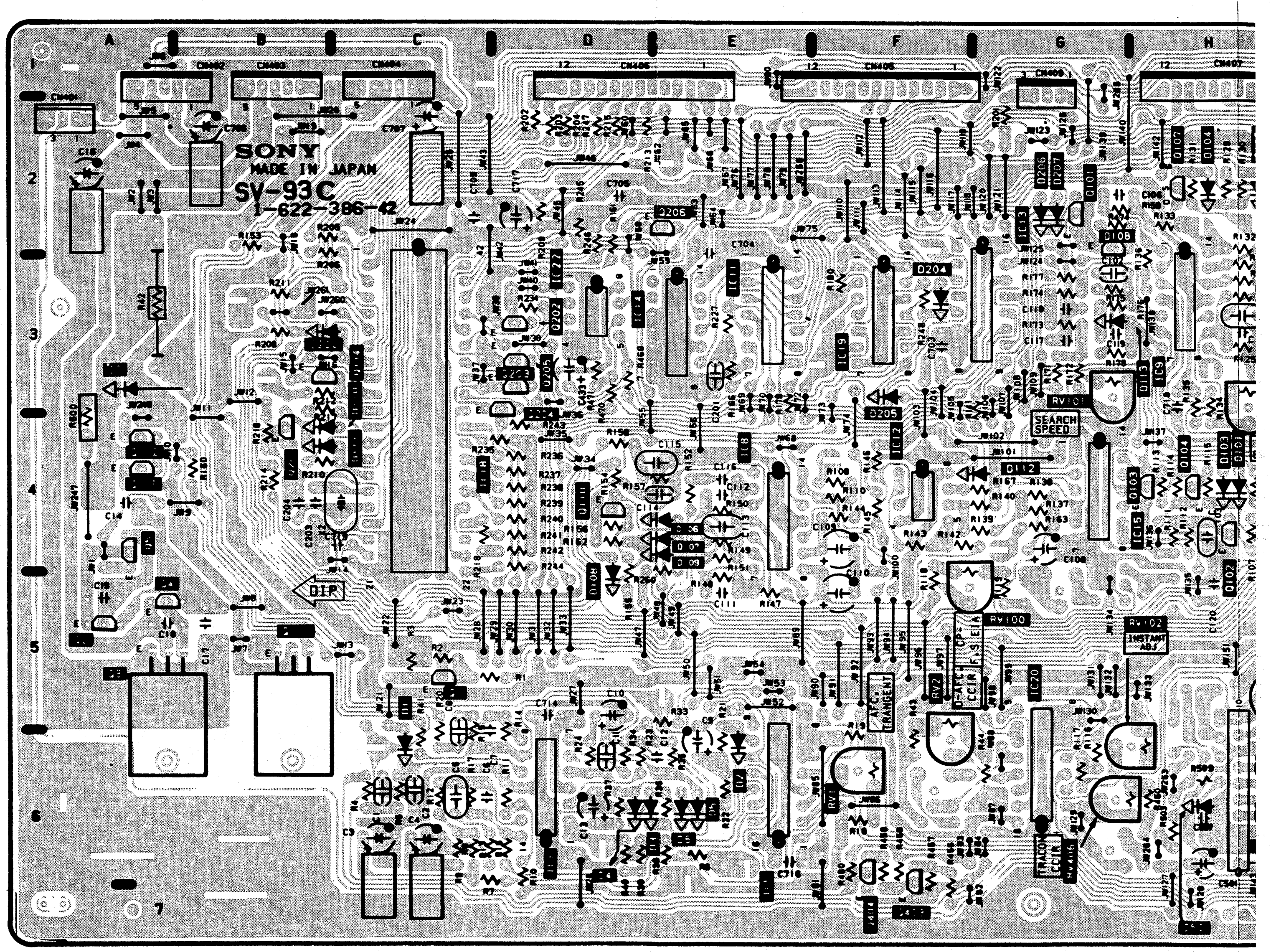
NOTE;

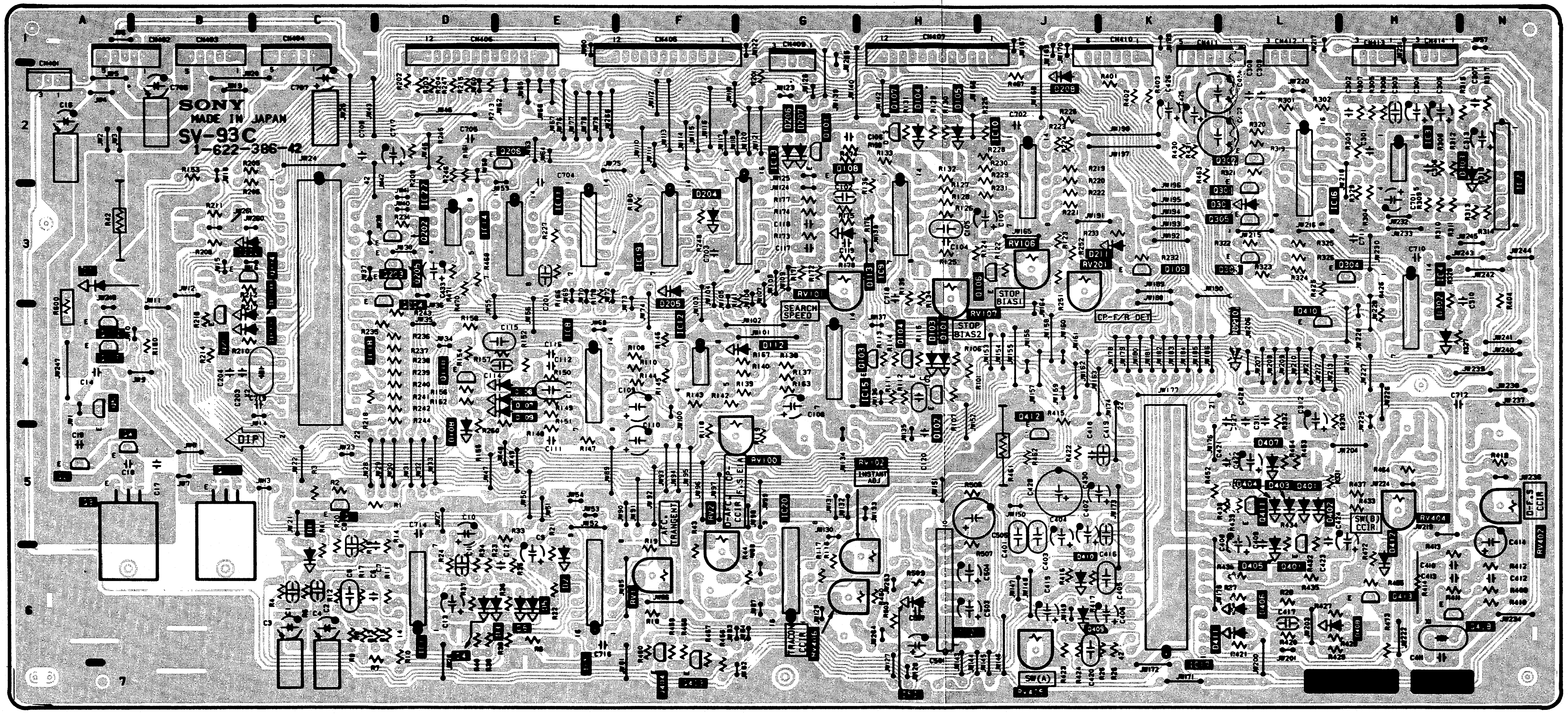
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

SV-93C;SERVO SYSTEM
EK;S/N 10401 thru 11100

SV-93C (1-622-386-42)

CN401	A-2
CN402	A-1
CN403	B-1
CN404	C-1
CN405	F-1
CN406	D-1
CN407	H-1
CN409	G-1
CN410	K-1
CN411	K-1
CN412	L-1
CN413	M-1
CN414	M-1
D1	C-6
D2	E-6
D3	E-6
D4	E-6
D5	E-6
D6	D-6
D7	A-3
D101	H-4
D103	H-4
D104	H-2
D105	H-2
D106	E-4
D107	E-4
D108	D-5
D109	E-4
D110	B-4
D111	B-4
D112	G-4
D113	G-3
D202	B-3
D204	F-3
D205	F-3
D206	G-2
D207	G-2
D208	J-2
D210	L-4
D211	K-3
D301	L-3
D302	M-4
D303	N-2
D401	L-5
D402	L-5
D403	L-5
D404	L-5
D405	L-5
D406	L-6
D407	L-5
D408	L-6
D409	J-6
D410	J-6
D411	L-6
D412	M-6
D501	H-6
IC1	D-6
IC2	N-2
IC3	M-2
IC4	M-3
IC5	E-6
IC8	E-4
IC9	H-3
IC10	J-2
IC11	E-3
IC12	F-4
IC13	G-3
IC14	E-3
IC15	G-4
IC16	L-2
IC17	K-5
IC18	C-3
IC19	F-3
IC20	G-6
IC21	H-6
IC22	D-3
Q1	C-5
Q2	A-5
Q3	A-5
Q4	A-5
Q5	A-4
Q101	G-2
Q102	H-4
Q103	H-4
Q104	H-4
Q106	J-3
Q107	H-2
Q108	G-2
Q109	K-3
Q110	D-4
Q111	B-5
Q112	A-4
Q113	A-4
Q114	B-3
Q201	B-4
Q202	D-3
Q203	D-3
Q204	D-3
Q205	D-3
Q206	E-2
Q301	L-3
Q302	L-2
Q303	L-3
Q304	M-3
Q305	L-3
Q401	L-5
Q403	F-6
Q404	F-6
Q408	M-6
Q411	L-5
Q412	J-5
Q413	M-6
RV1	F-6
RV2	F-6
RV100	F-5
RV101	G-3
RV102	H-6
RV106	J-3
RV107	H-3
RV201	J-3
RV402	N-5
RV404	M-5
RV405	J-6
RV406	G-6
X1	M-6
X2	C-4




SONY
MADE IN JAPAN
SV-93C
1-622-386-42
SEARCH SPEED
STOP BIAS1
STOP BIAS2
CP-F/R DET
INSTANT ADJ
SW(A)
SW(B) CCIR
DIP

SV-93C

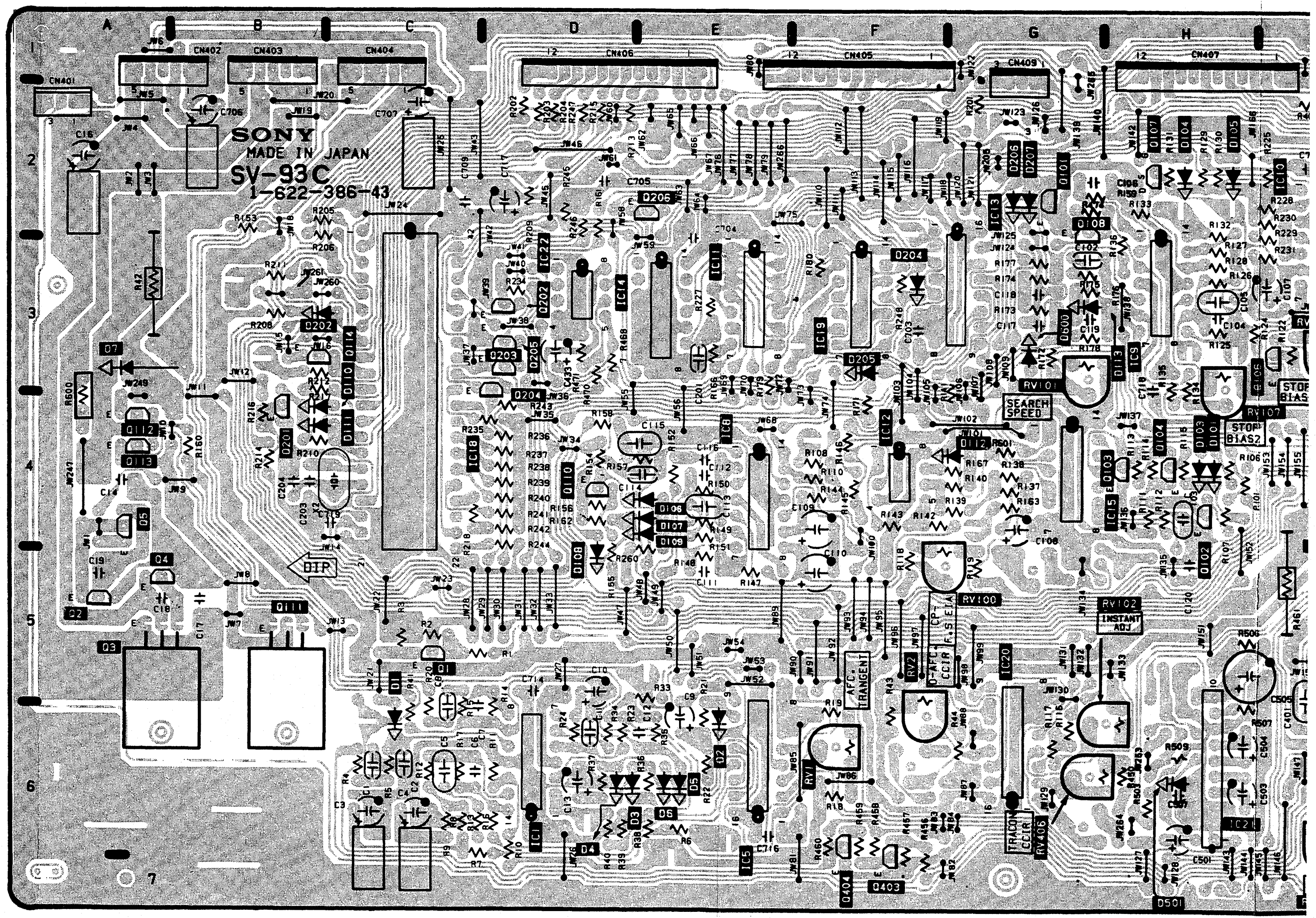
-COMPONENT SIDE-

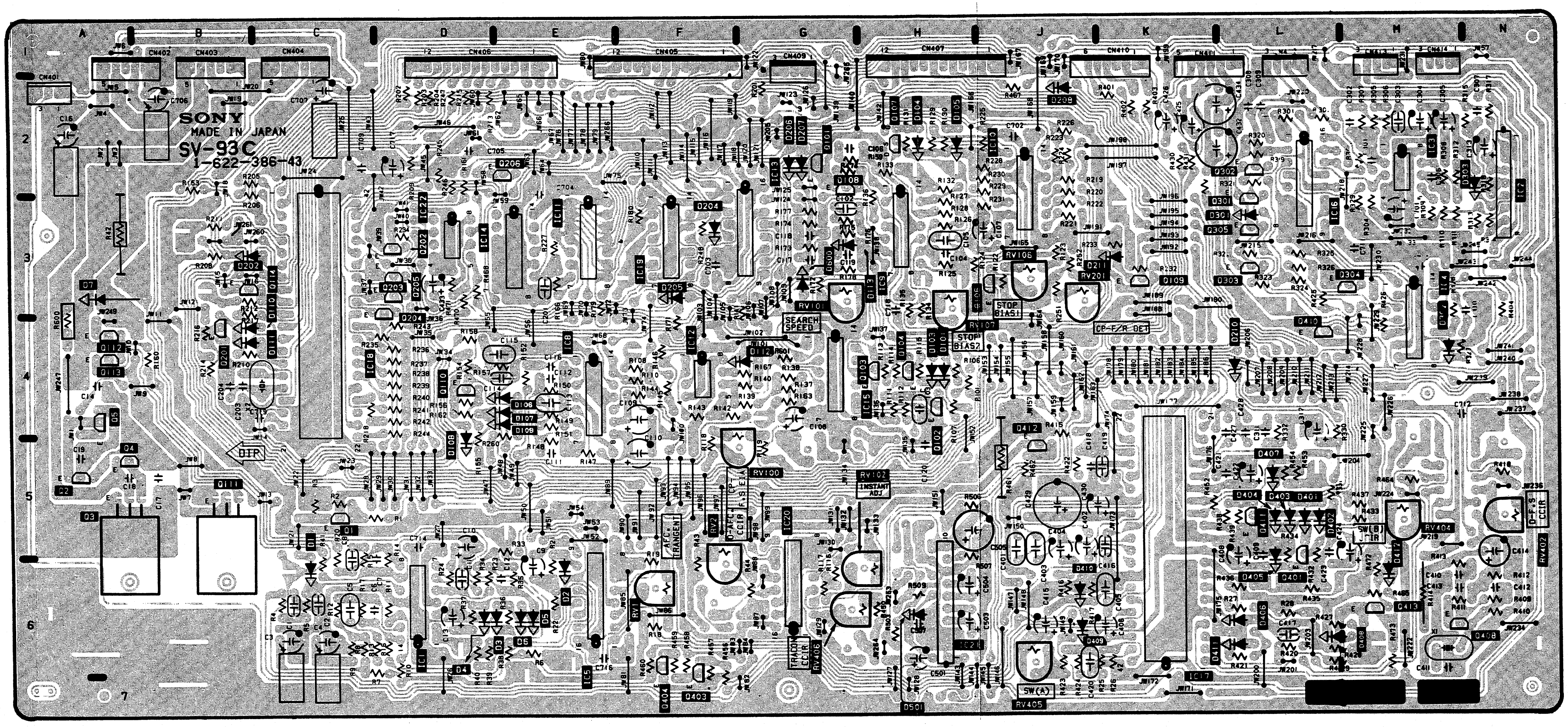
1-622-386-42
VO-9600P

SV-93C;SERVO SYSTEM
EK;S/N 11101 and higher

SV-93C (1-622-386-43)

CN401	A-2
CN402	A-1
CN403	B-1
CN404	C-1
CN405	F-1
CN406	D-1
CN407	H-1
CN409	G-1
CN410	K-1
CN411	K-1
CN412	L-1
CN413	M-1
CN414	M-1
D1	C-6
D2	E-6
D3	E-6
D4	E-6
D5	E-6
D6	D-6
D7	A-3
D101	H-4
D103	H-4
D104	H-2
D105	H-2
D106	E-4
D107	E-4
D108	D-5
D109	E-4
D110	B-4
D111	B-4
D112	G-4
D113	G-3
D202	B-3
D204	F-3
D205	F-3
D206	G-2
D207	G-2
D208	J-2
D210	L-4
D211	K-3
D301	L-3
D302	M-4
D303	N-2
D401	L-5
D402	L-5
D403	L-5
D404	L-5
D405	L-5
D406	L-6
D407	L-5
D408	L-6
D409	J-6
D410	J-6
D411	L-6
D412	M-6
D501	H-6
D600	G-3
IC1	D-6
IC2	N-2
IC3	M-2
IC4	M-3
IC5	E-6
IC8	E-4
IC9	H-3
IC10	J-2
IC11	E-3
IC12	F-4
IC13	G-3
IC14	E-3
IC15	G-4
IC16	L-2
IC17	K-5
IC18	C-3
IC19	F-3
IC20	G-6
IC21	H-6
IC22	D-3
Q1	C-5
Q2	A-5
Q3	A-5
Q4	A-5
Q5	A-4
Q101	G-2
Q102	H-4
Q103	H-4
Q104	H-4
Q106	J-3
Q107	H-2
Q108	G-2
Q109	K-3
Q110	D-4
Q111	B-5
Q112	A-4
Q113	A-4
Q114	B-3
Q201	B-4
Q202	D-3
Q203	D-3
Q204	D-3
Q205	D-3
Q206	E-2
Q301	L-3
Q302	L-2
Q303	L-3
Q304	M-3
Q305	L-3
Q401	L-5
Q403	F-6
Q404	F-6
Q408	M-6
Q411	L-5
Q412	J-5
Q413	M-6
RV1	F-6
RV2	F-6
RV100	F-5
RV101	G-3
RV102	H-6
RV106	J-3
RV107	H-3
RV201	J-3
RV402	N-5
RV404	M-5
RV405	J-6
RV406	G-6
X1	M-6
X2	C-4


SONY
MADE IN JAPAN
SV-93C
1-622-386-43
A
B
C
D
E
F
G
H
1
2
3
4
5
6
7
CN401
CN402
CN403
CN404
CN406
CN405
CN409
CN407
SEARCH SPEED
STOP BIAS
STOP BIAS2
INSTANT ADJ
DIP
RV100
RV101
RV102
RV1
RV2
TRANGENT


SONY
MADE IN JAPAN
SV-93C
1-622-386-43
CN401
CN402
CN403
CN404
CN406
CN405
CN408
CN407
CN410
CN411
SEARCH SPEED
STOP BIAS1
STOP BIAS2
CP-F/R DET
1INSTANT ADJ
AFC TRANGENT
TRACK CCIR
SW(A)
SW(B)
D-FAST CCIR
DIR

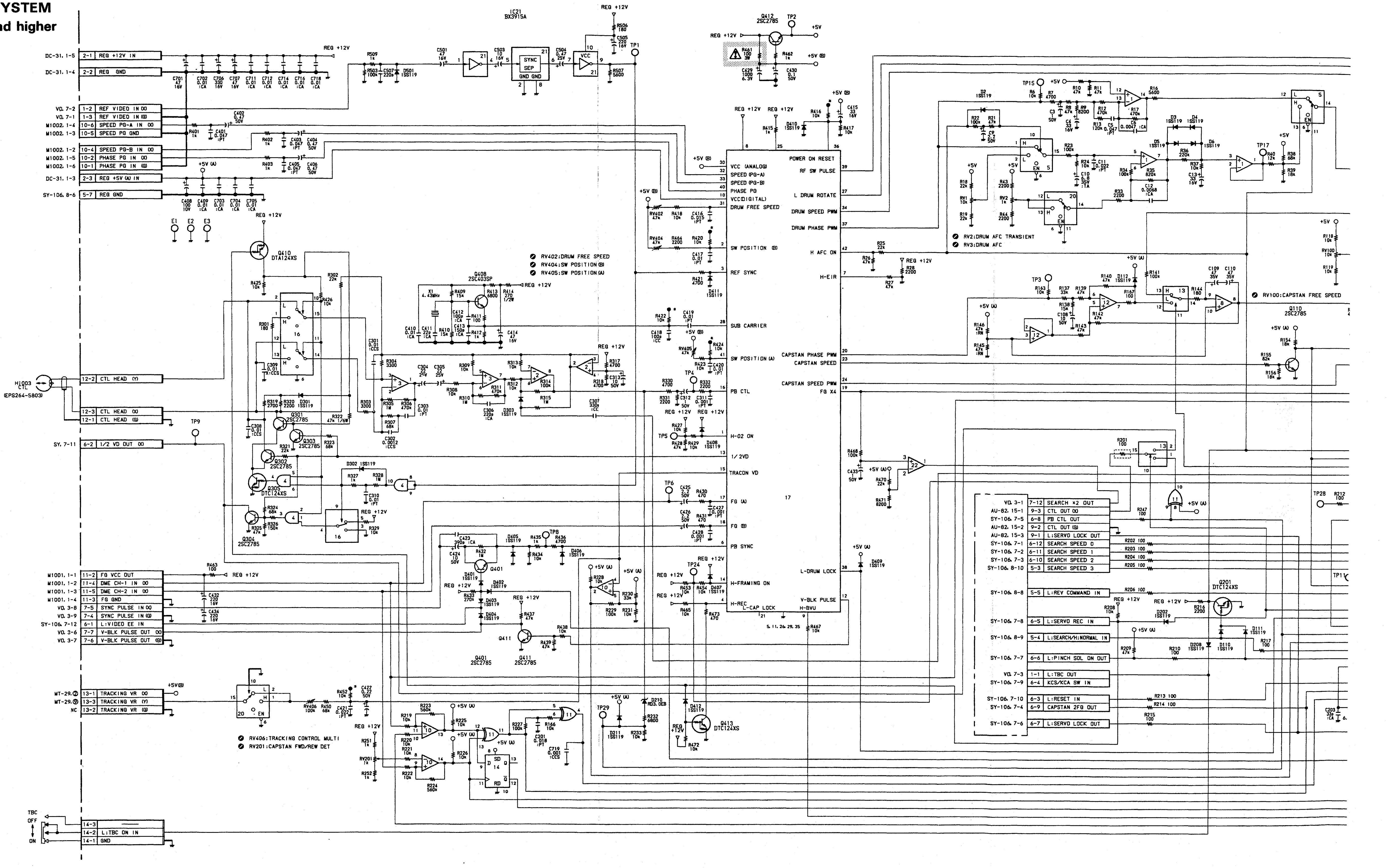
SV-93C

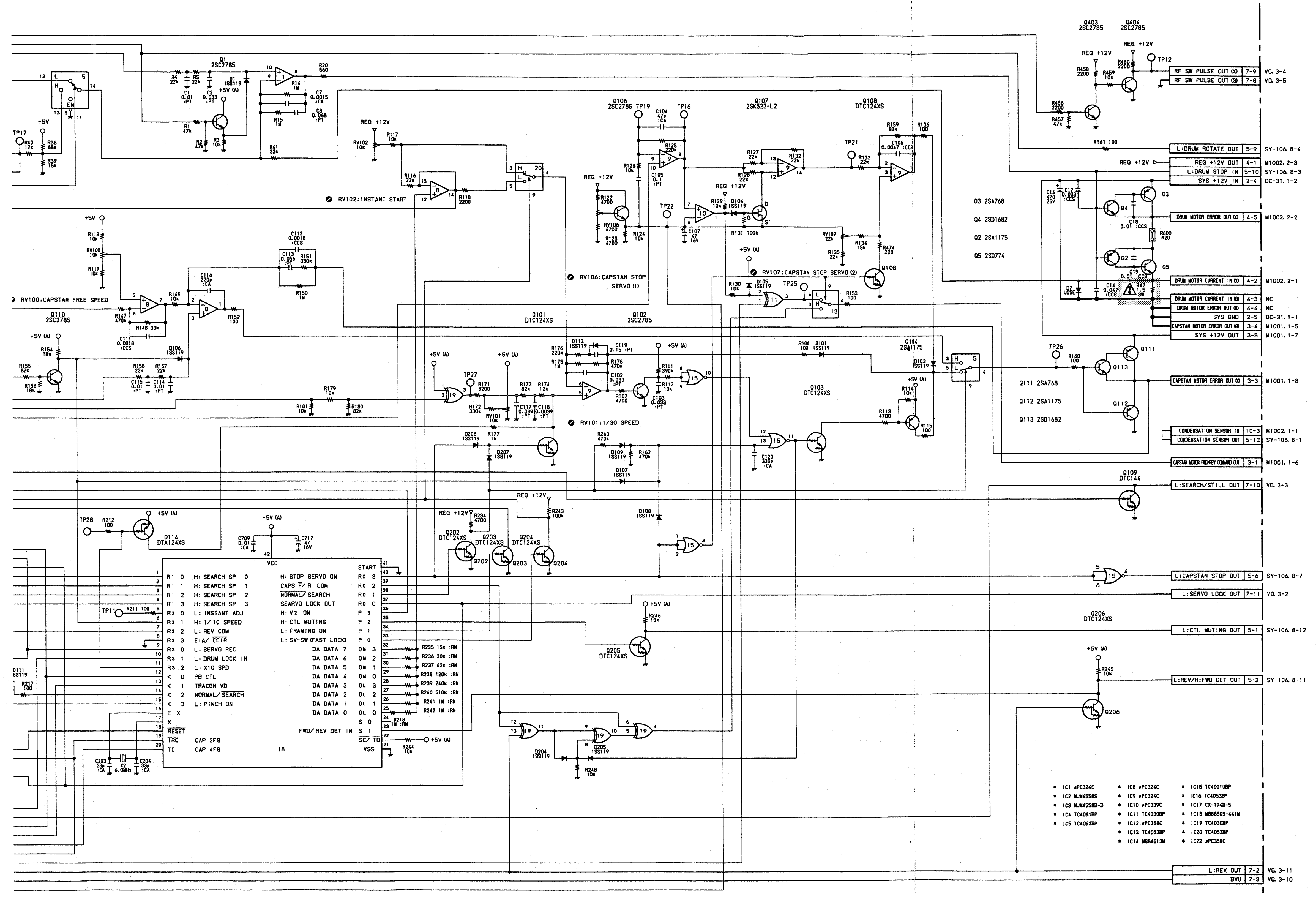
-COMPONENT SIDE-

1-622-386-43
VO-9600P

SV-93C;SERVO SYSTEM

EK;S/N 10001 and higher


DC-31. 1-5 2-1 REG +12V IN
DC-31. 1-4 2-2 REG GND
VO. 7-2 1-2 REF VIDEO IN (N)
VO. 7-1 1-3 REF VIDEO IN (G)
M1002. 1-4 10-6 SPEED PG-A IN (N)
M1002. 1-3 10-5 SPEED PG GND
M1002. 1-2 10-4 SPEED PG-B IN (N)
M1002. 1-5 10-2 PHASE PG IN (N)
M1002. 1-6 10-1 PHASE PG IN (G)
DC-31. 1-3 2-3 REG +5V (A) IN
SY-106. 8-6 5-7 REG GND
H1003 CTL (EPS264-5803)
12-2 CTL HEAD (Y)
12-3 CTL HEAD (N)
12-1 CTL HEAD (G)
SY. 7-11 6-2 1/2 VD OUT (N)
M1001. 1-1 11-2 FG VCC OUT
M1001. 1-2 11-4 DME CH-1 IN (N)
M1001. 1-3 11-5 DME CH-2 IN (N)
M1001. 1-4 11-3 FG GND
VO. 3-8 7-5 SYNC PULSE IN (N)
VO. 3-9 7-4 SYNC PULSE IN (G)
SY-106. 7-12 6-1 L:VIDEO EE IN
VO. 3-6 7-7 V-BLK PULSE OUT (N)
VO. 3-7 7-6 V-BLK PULSE OUT (G)
MT-29.② 13-1 TRACKING VR (N)
MT-29.③ 13-3 TRACKING VR (Y)
NC 13-2 TRACKING VR (G)
TBC OFF ON
14-3
14-2 L:TBC ON IN
14-1 GND
IC21 BX3915A
SYNC SEP
Q410 DTA124XS
Q408 2SC403SP
Q412 2SC2785
Q301 2SC2785
Q302 2SC2785
Q303 2SC2785
Q304 2SC2785
Q305 DTC124XS
Q401 2SC2785
Q411 2SC2785
Q413 DTC124XS
Q110 2SC2785
Q201 DTC124XS
RV402:DRUM FREE SPEED
RV404:SW POSITION (B)
RV405:SW POSITION (A)
RV406:TRACKING CONTROL MULTI
RV201:CAPSTAN FWD/REW DET
RV2:DRUM AFC TRANSIENT
RV3:DRUM AFC
RV100:CAPSTAN FREE SPEED
VCC (ANALOG)
SPEED (PG-A)
SPEED (PG-B)
PHASE PG
VCC(DIGITAL)
DRUM FREE SPEED
SW POSITION (B)
REF SYNC
SUB CARRIER
SW POSITION (A)
PB CTL
H-02 ON
1/2VD
TRACON VD
FG (A)
FG (B)
PB SYNC
H-FRAMING ON
H-REC
L-CAP LOCK
POWER ON RESET
RF SW PULSE
L DRUM ROTATE
DRUM SPEED PWM
DRUM PHASE PWM
H AFC ON
H-EIR
CAPSTAN PHASE PWM
CAPSTAN SPEED
CAPSTAN SPEED PWM
FG X4
L-DRUM LOCK
V-BLK PULSE
H-BVU
VO. 3-1 7-12 SEARCH ×2 OUT
AU-82. 15-1 9-3 CTL OUT (N)
SY-106. 7-5 6-8 PB CTL OUT
AU-82. 15-2 9-2 CTL OUT (G)
AU-82. 15-3 9-1 L:SERVO LOCK OUT
SY-106. 7-1 6-12 SEARCH SPEED 0
SY-106. 7-2 6-11 SEARCH SPEED 1
SY-106. 7-3 6-10 SEARCH SPEED 2
SY-106. 8-10 5-3 SEARCH SPEED 3
SY-106. 8-8 5-5 L:REV COMMAND IN
SY-106. 7-8 6-5 L:SERVO REC IN
SY-106. 8-9 5-4 L:SEARCH/H:NORMAL IN
SY-106. 7-7 6-6 L:PINCH SOL ON OUT
VO. 7-3 1-1 L:TBC OUT
SY-106. 7-9 6-4 KCS/KCA SW IN
SY-106. 7-10 6-3 L:RESET IN
SY-106. 7-4 6-9 CAPSTAN 2FG OUT
SY-106. 7-6 6-7 L:SERVO LOCK OUT
TP1 TP2 TP3 TP4 TP5 TP6 TP8 TP9 TP15 TP17 TP24 TP28 TP29
E1 E2 E3
REG +12V
+5V
+5V (A)
+5V (B)

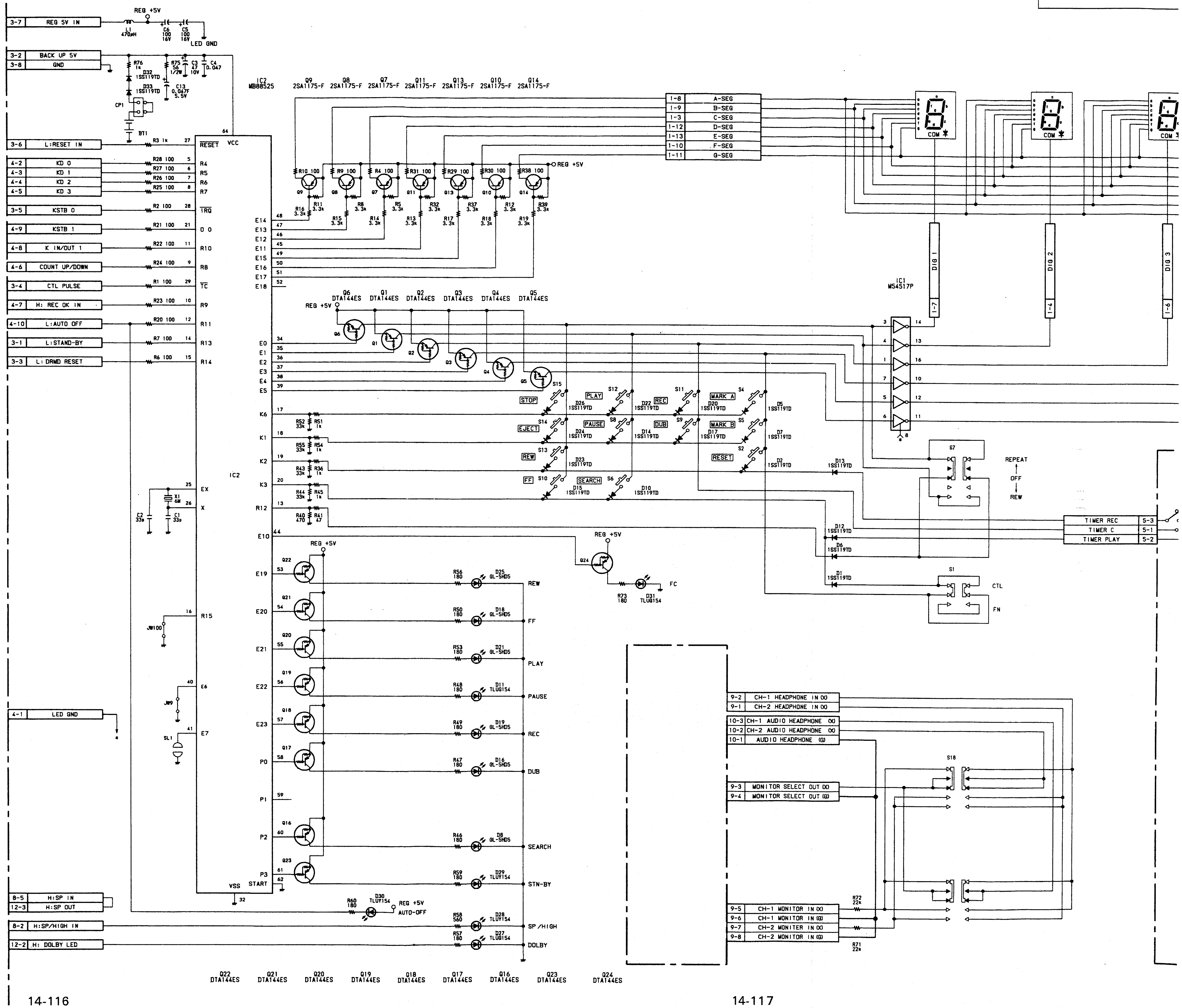

RF SW PULSE OUT (X) 7-9 VO. 3-4
RF SW PULSE OUT (G) 7-8 VO. 3-5
L:DRUM ROTATE OUT 5-9 SY-106. 8-4
REG +12V OUT 4-1 M1002. 2-3
L:DRUM STOP IN 5-10 SY-106. 8-3
SYS +12V IN 2-4 DC-31. 1-2
DRUM MOTOR ERROR OUT (X) 4-5 M1002. 2-2
DRUM MOTOR CURRENT IN (X) 4-2 M1002. 2-1
DRUM MOTOR CURRENT IN (G) 4-3 NC
DRUM MOTOR ERROR OUT (G) 4-4 NC
SYS GND 2-5 DC-31. 1-1
CAPSTAN MOTOR ERROR OUT (G) 3-4 M1001. 1-5
SYS +12V OUT 3-5 M1001. 1-7
CAPSTAN MOTOR ERROR OUT (X) 3-3 M1001. 1-8
CONDENSATION SENSOR IN 10-3 M1002. 1-1
CONDENSATION SENSOR OUT 5-12 SY-106. 8-1
CAPSTAN MOTOR FWD/REV COMMAND OUT 3-1 M1001. 1-6
L:SEARCH/STILL OUT 7-10 VO. 3-3
L:CAPSTAN STOP OUT 5-6 SY-106. 8-7
L:SERVO LOCK OUT 7-11 VO. 3-2
L:CTL MUTING OUT 5-1 SY-106. 8-12
L:REV/H:FWD DET OUT 5-2 SY-106. 8-11
L;REV OUT 7-2 VO. 3-11
BVU 7-3 VO. 3-10
RV100:CAPSTAN FREE SPEED
RV102:INSTANT START
RV106:CAPSTAN STOP SERVO (1)
RV107:CAPSTAN STOP SERVO (2)
RV101:1/30 SPEED
Q3 2SA768
Q4 2SD1682
Q2 2SA1175
Q5 2SD774
Q111 2SA768
Q112 2SA1175
Q113 2SD1682
Q403 2SC2785
Q404 2SC2785
Q1 2SC2785
Q106 2SC2785
Q107 2SK523-L2
Q108 DTC124XS
Q110 2SC2785
Q101 DTC124XS
Q102 2SC2785
Q103 DTC124XS
Q104 2SA1175
Q109 DTC144
Q114 DTA124XS
Q202 DTC124XS
Q203 DTC124XS
Q204 DTC124XS
Q205 DTC124XS
Q206 DTC124XS
VCC
START
R1 0 H: SEARCH SP 0
R1 1 H: SEARCH SP 1
R1 2 H: SEARCH SP 2
R1 3 H: SEARCH SP 3
R2 0 L: INSTANT ADJ
R2 1 H: 1/10 SPEED
R2 2 L: REV COM
R2 3 EIA/ CCIR
R3 0 L: SERVO REC
R3 1 L: DRUM LOCK IN
R3 2 L: X10 SPD
K 0 PB CTL
K 1 TRACON VD
K 2 NORMAL/ SEARCH
K 3 L: PINCH ON
E X
X
RESET
IRQ CAP 2FG
TC CAP 4FG
H: STOP SERVO ON R0 3
CAPS F/ R COM R0 2
NORMAL/ SEARCH R0 1
SEARVO LOCK OUT R0 0
H: V2 ON P 3
H: CTL MUTING P 2
L: FRAMING ON P 1
L: SV-SW (FAST LOCK) P 0
DA DATA 7 OM 3
DA DATA 6 OM 2
DA DATA 5 OM 1
DA DATA 4 OM 0
DA DATA 3 OL 3
DA DATA 2 OL 2
DA DATA 1 OL 1
DA DATA 0 OL 0
S 0
FWD/ REV DET IN S 1
SC/ TO
VSS
* IC1 μPC324C
* IC2 NJM4558S
* IC3 NJM4558D-D
* IC4 TC4081BP
* IC5 TC4053BP
* IC8 μPC324C
* IC9 μPC324C
* IC10 μPC339C
* IC11 TC4030BP
* IC12 μPC358C
* IC13 TC4053BP
* IC14 MB84013M
* IC15 TC4001UBP
* IC16 TC4053BP
* IC17 CX-194B-5
* IC18 MB88505-441M
* IC19 TC4030BP
* IC20 TC4053BP
* IC22 μPC358C

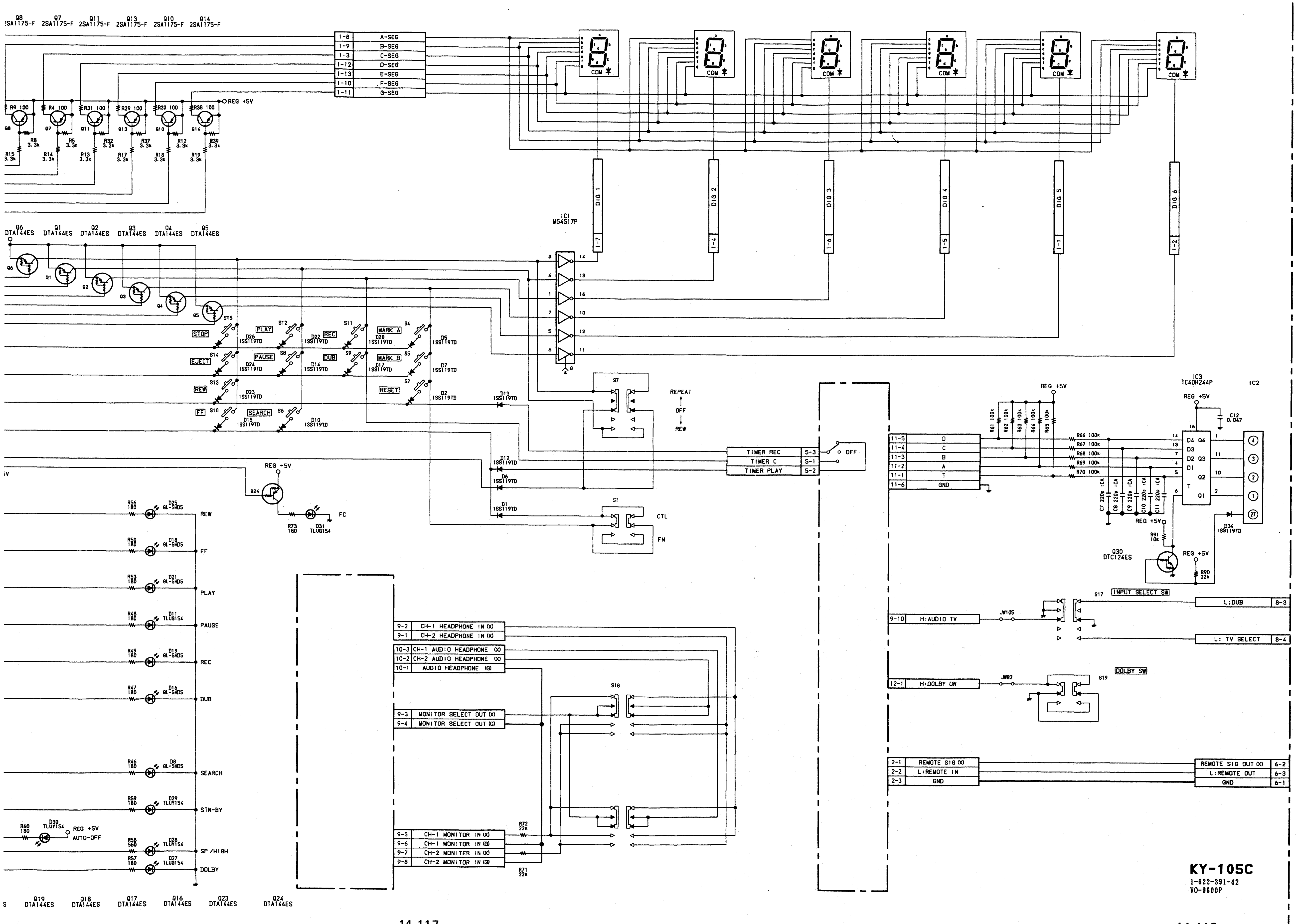
SV-93C
1-622-386-41,42,43
VO-9600P

NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

KY-105C:FUNCTION KEY/DISPLAY
EK:S/N 10001 thru 10400

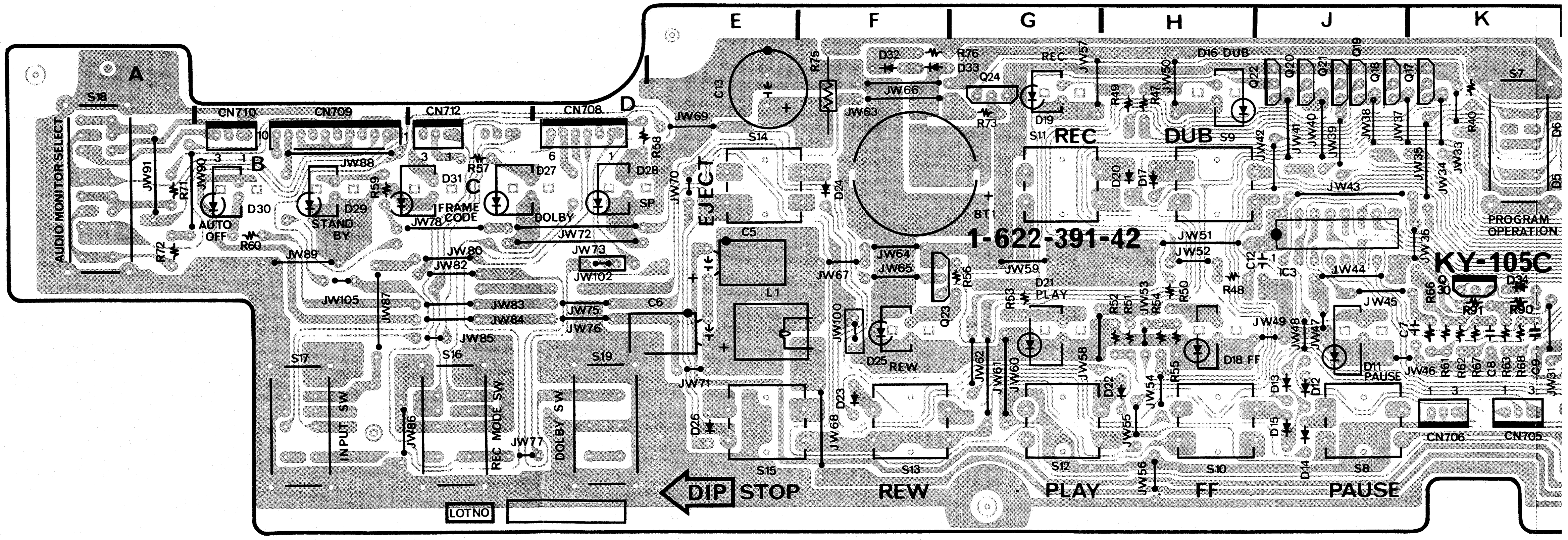

3-7 REG 5V IN
REG +5V
LED GND
3-2 BACK UP 5V
3-8 GND
IC2 MB88525
3-6 L:RESET IN
4-2 KD 0
4-3 KD 1
4-4 KD 2
4-5 KD 3
3-5 KSTB 0
4-9 KSTB 1
4-8 K IN/OUT 1
4-6 COUNT UP/DOWN
3-4 CTL PULSE
4-7 H: REC OK IN
4-10 L:AUTO OFF
3-1 L:STAND-BY
3-3 L: DRMD RESET
4-1 LED GND
8-5 H:SP IN
12-3 H:SP OUT
8-2 H:SP/HIGH IN
12-2 H: DOLBY LED
1-8 A-SEG
1-9 B-SEG
1-3 C-SEG
1-12 D-SEG
1-13 E-SEG
1-10 F-SEG
1-11 G-SEG
DIG 1
DIG 2
DIG 3
IC1 M54517P
STOP
PLAY
REC
MARK A
EJECT
PAUSE
DUB
MARK B
REW
FF
SEARCH
RESET
REPEAT
OFF
REW
TIMER REC 5-3
TIMER C 5-1
TIMER PLAY 5-2
CTL
FN
FC
REW
FF
PLAY
PAUSE
REC
DUB
SEARCH
STN-BY
AUTO-OFF
SP/HIGH
DOLBY
9-2 CH-1 HEADPHONE IN (X)
9-1 CH-2 HEADPHONE IN (X)
10-3 CH-1 AUDIO HEADPHONE (X)
10-2 CH-2 AUDIO HEADPHONE (X)
10-1 AUDIO HEADPHONE (G)
9-3 MONITOR SELECT OUT (X)
9-4 MONITOR SELECT OUT (G)
9-5 CH-1 MONITOR IN (X)
9-6 CH-1 MONITOR IN (G)
9-7 CH-2 MONITER IN (X)
9-8 CH-2 MONITOR IN (G)
S18
Q22 DTA144ES
Q21 DTA144ES
Q20 DTA144ES
Q19 DTA144ES
Q18 DTA144ES
Q17 DTA144ES
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES

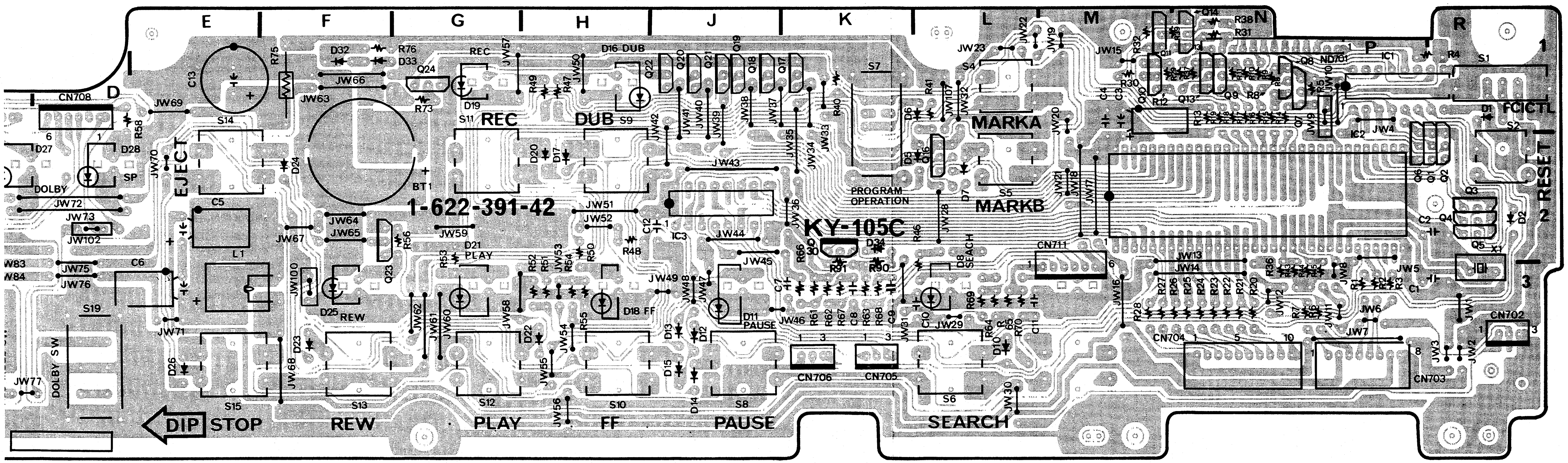

Q8 2SA1175-F
Q7 2SA1175-F
Q11 2SA1175-F
Q13 2SA1175-F
Q10 2SA1175-F
Q14 2SA1175-F
1-8 A-SEG
1-9 B-SEG
1-3 C-SEG
1-12 D-SEG
1-13 E-SEG
1-10 F-SEG
1-11 G-SEG
REG +5V
R9 100
R4 100
R31 100
R29 100
R30 100
R38 100
R8 3.3k
R5 3.3k
R32 3.3k
R37 3.3k
R12 3.3k
R39 3.3k
R15 3.3k
R14 3.3k
R13 3.3k
R17 3.3k
R18 3.3k
R19 3.3k
COM
DIG 1
DIG 2
DIG 3
DIG 4
DIG 5
DIG 6
1-7
1-4
1-6
1-5
1-1
1-2
IC1 M54517P
Q6 DTA144ES
Q1 DTA144ES
Q2 DTA144ES
Q3 DTA144ES
Q4 DTA144ES
Q5 DTA144ES
STOP
PLAY
REC
MARK A
EJECT
PAUSE
DUB
MARK B
REW
RESET
FF
SEARCH
S15
S14
S13
S10
S12
S8
S6
S11
S9
S4
S5
S2
D26 1SS119TD
D22 1SS119TD
D20 1SS119TD
D5 1SS119TD
D24 1SS119TD
D14 1SS119TD
D17 1SS119TD
D7 1SS119TD
D23 1SS119TD
D2 1SS119TD
D13 1SS119TD
D15 1SS119TD
D10 1SS119TD
D12 1SS119TD
D6 1SS119TD
D1 1SS119TD
S7
REPEAT
OFF
REW
S1
CTL
FN
TIMER REC 5-3
TIMER C 5-1
TIMER PLAY 5-2
OFF
REG +5V
Q24
R73 180
D31 TLUG154
FC
R56 180 D25 GL-5HD5 REW
R50 180 D18 GL-5HD5 FF
R53 180 D21 GL-5HD5 PLAY
R48 180 D11 TLUG154 PAUSE
R49 180 D19 GL-5HD5 REC
R47 180 D16 GL-5HD5 DUB
R46 180 D8 GL-5HD5 SEARCH
R59 180 D29 TLUY154 STN-BY
R60 180 D30 TLUY154 REG +5V AUTO-OFF
R58 560 D28 TLUY154 SP/HIGH
R57 180 D27 TLUG154 DOLBY
Q19 DTA144ES
Q18 DTA144ES
Q17 DTA144ES
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES
9-2 CH-1 HEADPHONE IN (H)
9-1 CH-2 HEADPHONE IN (H)
10-3 CH-1 AUDIO HEADPHONE (H)
10-2 CH-2 AUDIO HEADPHONE (H)
10-1 AUDIO HEADPHONE (G)
S18
9-3 MONITOR SELECT OUT (H)
9-4 MONITOR SELECT OUT (G)
9-5 CH-1 MONITOR IN (H)
9-6 CH-1 MONITOR IN (G)
9-7 CH-2 MONITOR IN (H)
9-8 CH-2 MONITOR IN (G)
R72 22k
R71 22k
REG +5V
R61 100k
R62 100k
R63 100k
R64 100k
R65 100k
11-5 D
11-4 C
11-3 B
11-2 A
11-1 T
11-6 GND
R66 100k
R67 100k
R68 100k
R69 100k
R70 100k
C7 220p :CA
C8 220p :CA
C9 220p :CA
C10 220p :CA
C11 220p :CA
IC3 TC40H244P
IC2
REG +5V
C12 0.047
D4 Q4
D3
D2 Q3
D1
Q2
T
Q1
REG +5V
R91 10k
Q30 DTC124ES
REG +5V
R90 22k
D34 1SS119TD
S17 INPUT SELECT SW
9-10 H:AUDIO TV
JW105
L:DUB 8-3
L: TV SELECT 8-4
12-1 H:DOLBY ON
JW82
S19 DOLBY SW
2-1 REMOTE SIG (H)
2-2 L:REMOTE IN
2-3 GND
REMOTE SIG OUT (H) 6-2
L:REMOTE OUT 6-3
GND 6-1
KY-105C
1-622-391-42
VO-9600P

KY-105C:FUNCTION KEY/DISPLAY
EK;S/N 10001 thru 10400

KY-105C (1-622-391-42)

BT1	F-2
CN701	N-1
CN702	R-3
CN703	P-3
CN704	N-3
CN705	K-3
CN706	K-3
CN708	D-1
CN709	B-1
CN710	B-1
CN711	M-3
CN712	C-1
D1	R-1
D2	R-2
D5	L-2
D6	L-1
D7	L-2
D8	L-3
D10	L-3
D11	J-3
D12	J-3
D13	J-3
D14	J-3
D15	J-3
D16	H-1
D17	H-2
D18	H-3
D19	G-1
D20	H-2
D21	G-3
D22	H-3
D23	F-3
D24	F-2
D25	F-3
D26	E-3
D27	C-2
D28	D-2
D29	B-2
D30	B-2
D31	B-2
D32	F-1
D33	F-1
D34	K-2
IC1	P-1
IC2	N-2
IC3	J-2
Q1	R-2
Q2	R-2
Q3	R-2
Q4	R-2
Q5	R-2
Q6	P-2
Q7	N-1
Q8	N-1
Q9	N-1
Q10	M-1
Q11	M-1
Q13	N-1
Q14	N-1
Q16	L-2
Q17	K-1
Q18	J-1
Q19	J-1
Q20	J-1
Q21	J-1
Q22	J-1
Q23	F-2
Q24	G-1
Q30	K-2
S1	R-1
S2	R-2
S4	L-1
S5	L-2
S6	L-3
S7	K-1
S8	J-3
S9	H-2
S10	H-3
S11	G-2
S12	G-3
S13	F-3
S14	E-2
S15	E-3
S16	C-3
S17	B-3
S18	A-2
S19	D-3
X1	R-3


A
B
C
D
E
F
G
H
J
K
AUDIO MONITOR SELECT
S18
CN710
CN709
CN712
CN708
AUTO OFF
STAND BY
FRAME CODE
DOLBY
SP
EJECT
INPUT SW
REC MODE SW
DOLBY SW
LOTNO
DIP
STOP
REW
PLAY
FF
PAUSE
REC
DUB
D16 DUB
BT1
1-622-391-42
KY-105C
PROGRAM OPERATION
IC3
L1
C5
C6
C13
CN706
CN705
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S19
D30
D29
D31
D27
D28
D24
D25
D21 PLAY
D18 FF
D11 PAUSE
D19
Q24
Q23
Q22
Q21
Q20
Q19
Q18
Q17
R75
R76
R73
D32
D33
JW66
JW63
JW69
JW70
JW72
JW73
JW102
JW89
JW105
JW87
JW86
JW77
JW83
JW84
JW85
JW75
JW76
JW80
JW82
JW88
JW78
JW91
JW90
JW71
JW67
JW64
JW65
JW59
JW100
JW68
JW62
JW61
JW60
JW58
JW51
JW52
JW43
JW44
JW45
JW46
JW49

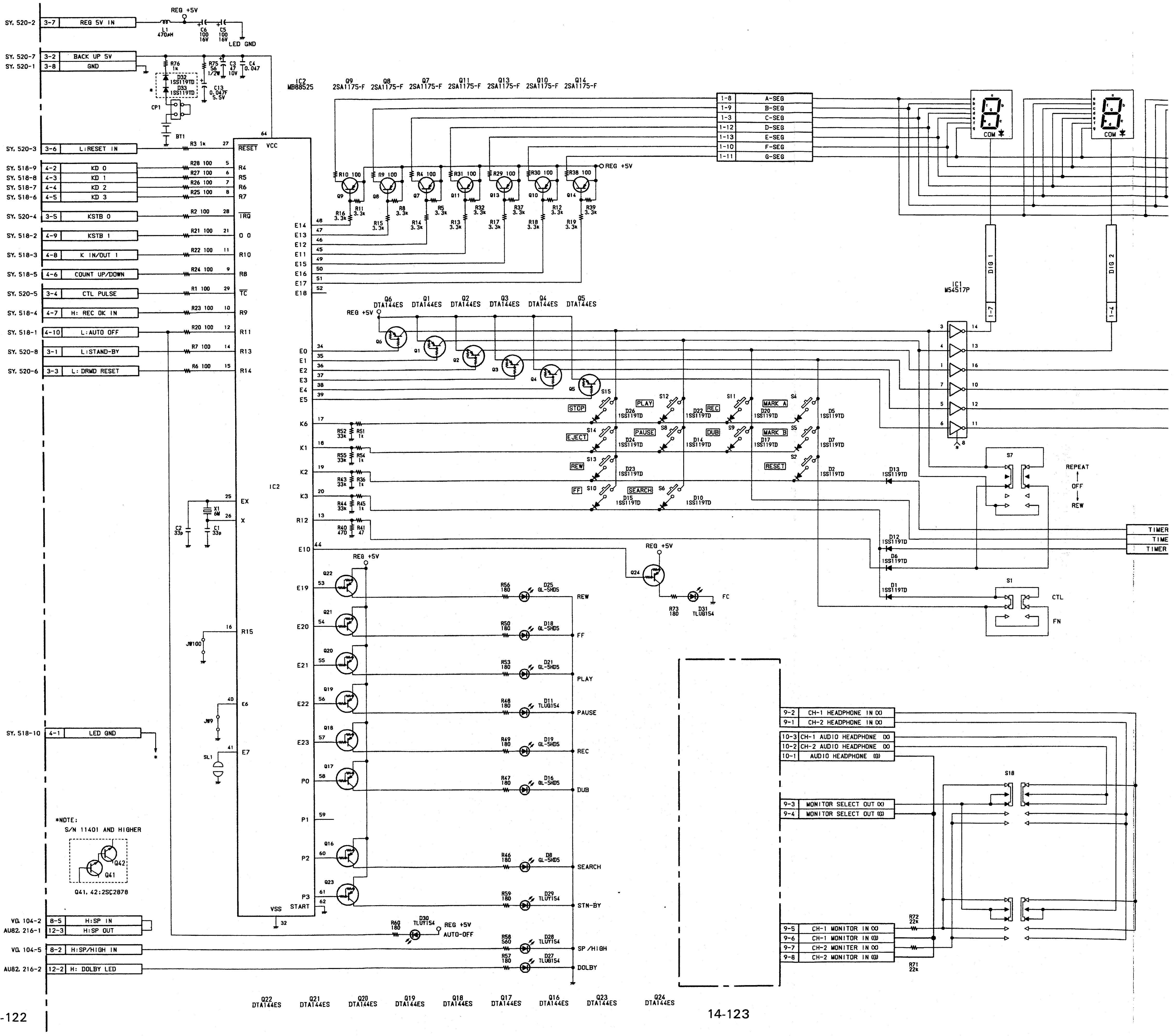

E
F
G
H
J
K
L
M
N
P
R
D
CN708
DOLBY
EJECT
S14
C5
L1
C6
S19
DOLBY SW
S15
DIP STOP
REW
S13
PLAY
S12
FF
S10
PAUSE
S8
SEARCH
S6
REC
S11
DUB
S9
1-622-391-42
KY-105C
PROGRAM OPERATION
MARKA
MARKB
S4
S5
S7
BT1
IC1
IC2
IC3
ND701
CN711
CN704
CN703
CN702
CN706
CN705
S1
S2
RESET
FCICTL
X1
1
2
3

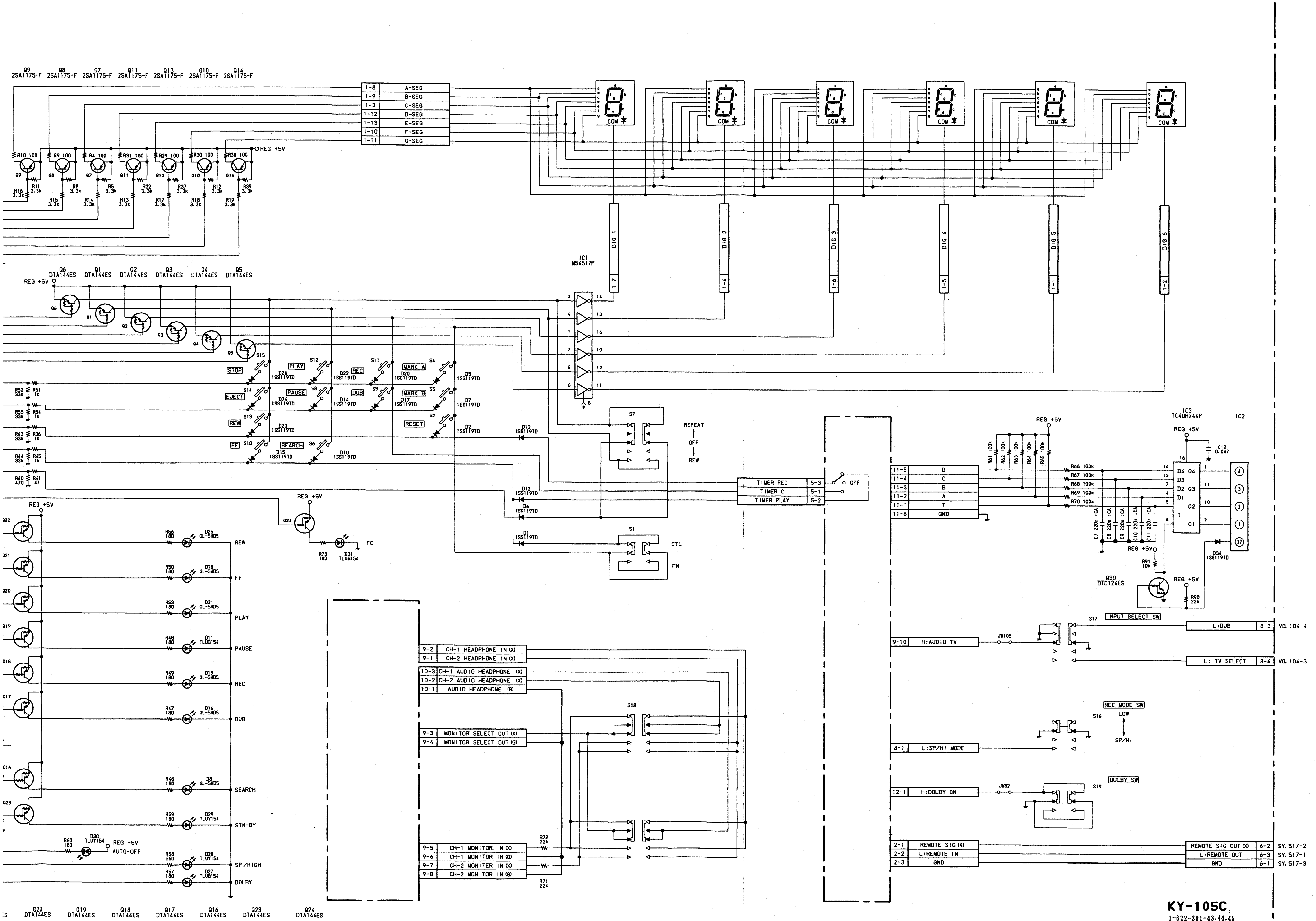
KY-105C

-COMPONENT SIDE-

1-622-391-42
VO-9600P

KY-105C:FUNCTION KEY/DISPLAY
EK;S/N 10401 and higher


SY. 520-2 3-7 REG 5V IN
REG +5V
L1 470μH
C6 100 16V
C5 100 16V
LED GND
SY. 520-7 3-2 BACK UP 5V
SY. 520-1 3-8 GND
R76 1k
D32 1SS119TD
D33 1SS119TD
R75 56 1/2W
C3 47 10V
C4 0.047
C13 0.047F 5.5V
CP1
BT1
IC2 MB88525
SY. 520-3 3-6 L:RESET IN
R3 1k
RESET
VCC
SY. 518-9 4-2 KD 0
SY. 518-8 4-3 KD 1
SY. 518-7 4-4 KD 2
SY. 518-6 4-5 KD 3
SY. 520-4 3-5 KSTB 0
SY. 518-2 4-9 KSTB 1
SY. 518-3 4-8 K IN/OUT 1
SY. 518-5 4-6 COUNT UP/DOWN
SY. 520-5 3-4 CTL PULSE
SY. 518-4 4-7 H: REC OK IN
SY. 518-1 4-10 L:AUTO OFF
SY. 520-8 3-1 L:STAND-BY
SY. 520-6 3-3 L: DRMD RESET
R28 100
R27 100
R26 100
R25 100
R2 100
R21 100
R22 100
R24 100
R1 100
R23 100
R20 100
R7 100
R6 100
R4
R5
R6
R7
IRQ
O 0
R10
R8
TC
R9
R11
R13
R14
Q9 2SA1175-F
Q8 2SA1175-F
Q7 2SA1175-F
Q11 2SA1175-F
Q13 2SA1175-F
Q10 2SA1175-F
Q14 2SA1175-F
1-8 A-SEG
1-9 B-SEG
1-3 C-SEG
1-12 D-SEG
1-13 E-SEG
1-10 F-SEG
1-11 G-SEG
REG +5V
COM
E14
E13
E12
E11
E15
E16
E17
E18
DIG 1
DIG 2
IC1 M54517P
Q6 DTA144ES
Q1 DTA144ES
Q2 DTA144ES
Q3 DTA144ES
Q4 DTA144ES
Q5 DTA144ES
E0
E1
E2
E3
E4
E5
K6
K1
K2
K3
R12
E10
STOP
PLAY
REC
MARK A
EJECT
PAUSE
DUB
MARK B
REW
RESET
FF
SEARCH
S15
S12
S11
S4
S14
S8
S9
S5
S13
S2
S10
S6
S7
REPEAT
OFF
REW
TIMER
S1
CTL
FN
EX
X
X1 4M
C2 33p
C1 33p
IC2
REG +5V
Q24
R73 180
D31 TLUG154
FC
Q22
Q21
Q20
Q19
Q18
Q17
Q16
Q23
E19
E20
E21
E22
E23
P0
P1
P2
P3
START
VSS
R15
JW100
E6
JW9
E7
SL1
R56 180 D25 GL-5HD5 REW
R50 180 D18 GL-5HD5 FF
R53 180 D21 GL-5HD5 PLAY
R48 180 D11 TLUG154 PAUSE
R49 180 D19 GL-5HD5 REC
R47 180 D16 GL-5HD5 DUB
R46 180 D8 GL-5HD5 SEARCH
R59 180 D29 TLUY154 STN-BY
R60 180 D30 TLUY154 REG +5V AUTO-OFF
R58 560 D28 TLUY154 SP/HIGH
R57 180 D27 TLUG154 DOLBY
SY. 518-10 4-1 LED GND
*NOTE:
S/N 11401 AND HIGHER
Q42
Q41
Q41, 42:2SC2878
VD. 104-2 8-5 H:SP IN
AU82. 216-1 12-3 H:SP OUT
VD. 104-5 8-2 H:SP/HIGH IN
AU82. 216-2 12-2 H: DOLBY LED
9-2 CH-1 HEADPHONE IN (X)
9-1 CH-2 HEADPHONE IN (X)
10-3 CH-1 AUDIO HEADPHONE (X)
10-2 CH-2 AUDIO HEADPHONE (X)
10-1 AUDIO HEADPHONE (G)
S18
9-3 MONITOR SELECT OUT (X)
9-4 MONITOR SELECT OUT (G)
9-5 CH-1 MONITOR IN (X)
9-6 CH-1 MONITOR IN (G)
9-7 CH-2 MONITER IN (X)
9-8 CH-2 MONITER IN (G)
R72 22k
R71 22k
Q22 DTA144ES
Q21 DTA144ES
Q20 DTA144ES
Q19 DTA144ES
Q18 DTA144ES
Q17 DTA144ES
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES

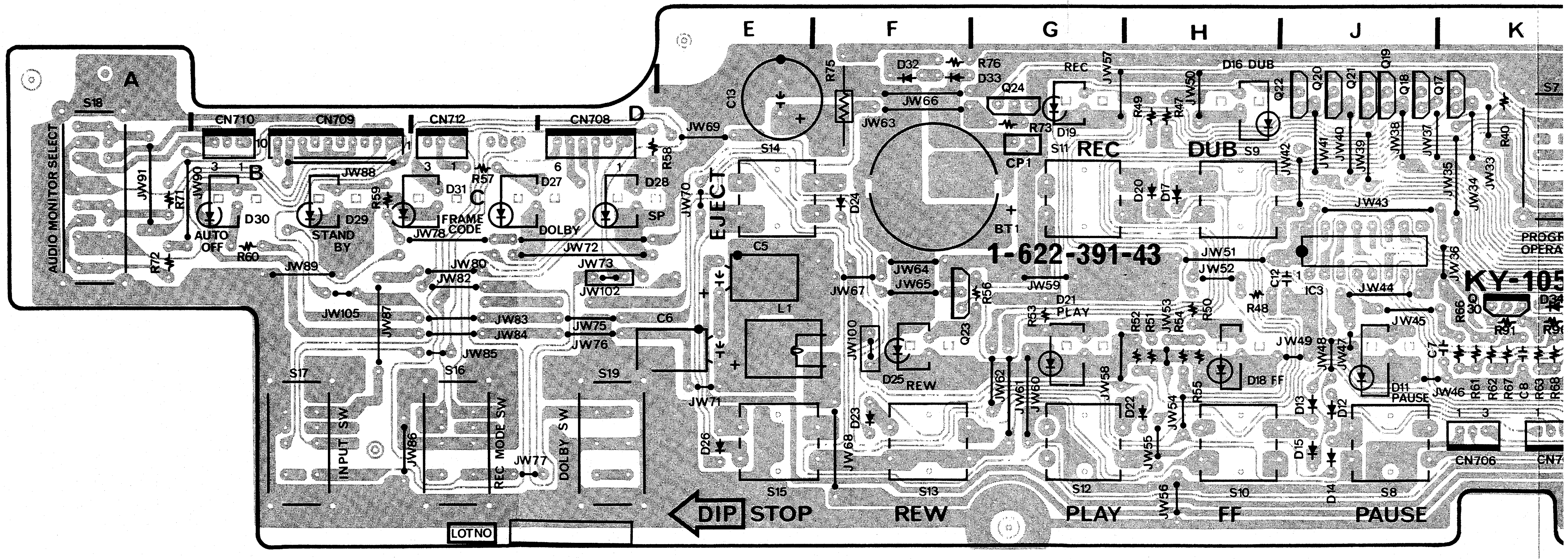

Q9 2SA1175-F
Q8 2SA1175-F
Q7 2SA1175-F
Q11 2SA1175-F
Q13 2SA1175-F
Q10 2SA1175-F
Q14 2SA1175-F
1-8 A-SEG
1-9 B-SEG
1-3 C-SEG
1-12 D-SEG
1-13 E-SEG
1-10 F-SEG
1-11 G-SEG
REG +5V
R10 100
R9 100
R4 100
R31 100
R29 100
R30 100
R38 100
COM
DIG 1
DIG 2
DIG 3
DIG 4
DIG 5
DIG 6
1-7
1-4
1-6
1-5
1-1
1-2
IC1 M54517P
Q6 DTA144ES
Q1 DTA144ES
Q2 DTA144ES
Q3 DTA144ES
Q4 DTA144ES
Q5 DTA144ES
STOP
PLAY
REC
MARK A
EJECT
PAUSE
DUB
MARK B
REW
RESET
FF
SEARCH
S15
S12
S11
S4
S14
S8
S9
S5
S13
S2
S10
S6
1SS119TD
S7
REPEAT
OFF
REW
S1
CTL
FN
FC
Q24
TIMER REC 5-3
TIMER C 5-1
TIMER PLAY 5-2
OFF
11-5 D
11-4 C
11-3 B
11-2 A
11-1 T
11-6 GND
R61 100k
R62 100k
R63 100k
R64 100k
R65 100k
R66 100k
R67 100k
R68 100k
R69 100k
R70 100k
IC3 TC40H244P
IC2
C12 0.047
D4 Q4
D3
D2 Q3
D1
Q2
T
Q1
④
③
②
①
㉗
D34 1SS119TD
Q30 DTC124ES
R91 10k
R90 22k
REW
FF
PLAY
PAUSE
REC
DUB
SEARCH
STN-BY
AUTO-OFF
SP/HIGH
DOLBY
GL-SHD5
TLUY154
TLUG154
9-2 CH-1 HEADPHONE IN (X)
9-1 CH-2 HEADPHONE IN (X)
10-3 CH-1 AUDIO HEADPHONE (X)
10-2 CH-2 AUDIO HEADPHONE (X)
10-1 AUDIO HEADPHONE (G)
9-3 MONITOR SELECT OUT (X)
9-4 MONITOR SELECT OUT (G)
9-5 CH-1 MONITOR IN (X)
9-6 CH-1 MONITOR IN (G)
9-7 CH-2 MONITER IN (X)
9-8 CH-2 MONITOR IN (G)
S18
R72 22k
R71 22k
S17 INPUT SELECT SW
9-10 H:AUDIO TV
JW105
L:DUB 8-3 VO. 104-4
L: TV SELECT 8-4 VO. 104-3
REC MODE SW
S16
LOW
SP/HI
8-1 L:SP/HI MODE
DOLBY SW
S19
JW82
12-1 H:DOLBY ON
2-1 REMOTE SIG (X)
2-2 L:REMOTE IN
2-3 GND
REMOTE SIG OUT (X) 6-2 SY. 517-2
L:REMOTE OUT 6-3 SY. 517-1
GND 6-1 SY. 517-3
Q20 DTA144ES
Q19 DTA144ES
Q18 DTA144ES
Q17 DTA144ES
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES

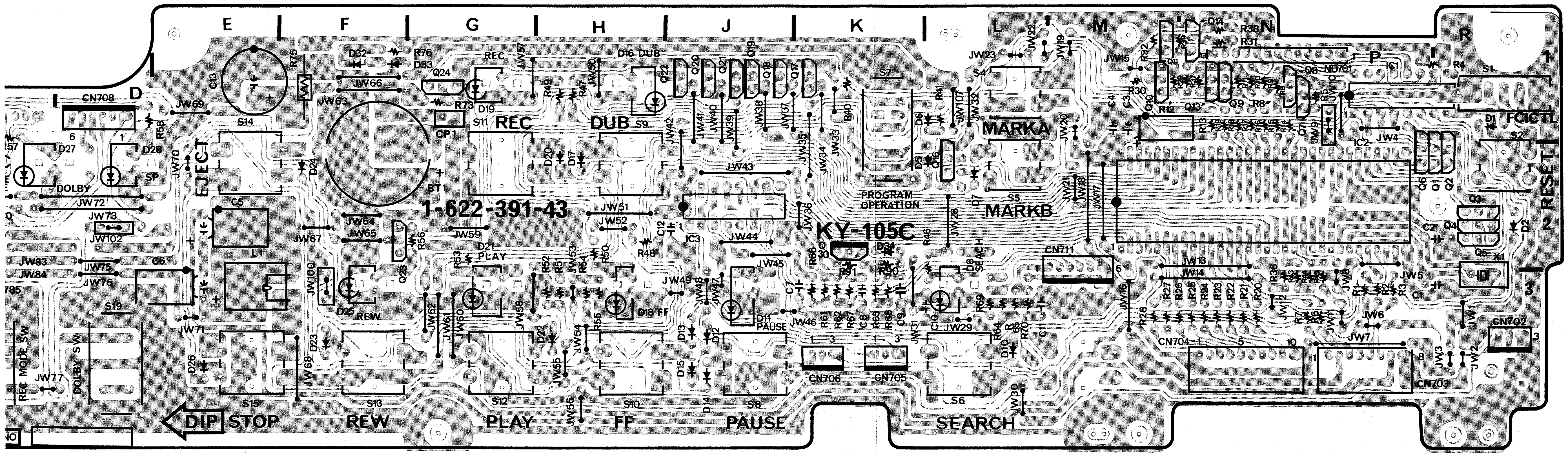
KY-105C
1-622-891-43.44.45
VO-9600P

KY-105C:FUNCTION KEY/DISPLAY
EK;S/N 10401 thru 10800

KY-105C (1-622-391-43)

BT1	F-2
CN701	N-1
CN702	R-3
CN703	P-3
CN704	N-3
CN705	K-3
CN706	K-3
CN708	D-1
CN709	B-1
CN710	B-1
CN711	M-3
CN712	C-1
D1	R-1
D2	R-2
D5	L-2
D6	L-1
D7	L-2
D8	L-3
D10	L-3
D11	J-3
D12	J-3
D13	J-3
D14	J-3
D15	J-3
D16	H-1
D17	H-2
D18	H-3
D19	G-1
D20	H-2
D21	G-3
D22	H-3
D23	F-3
D24	F-2
D25	F-3
D26	E-3
D27	C-2
D28	D-2
D29	B-2
D30	B-2
D31	B-2
D32	F-1
D33	F-1
D34	K-2
IC1	P-1
IC2	N-2
IC3	J-2
Q1	R-2
Q2	R-2
Q3	R-2
Q4	R-2
Q5	R-2
Q6	P-2
Q7	N-1
Q8	N-1
Q9	N-1
Q10	M-1
Q11	M-1
Q13	N-1
Q14	N-1
Q16	L-2
Q17	K-1
Q18	J-1
Q19	J-1
Q20	J-1
Q21	J-1
Q22	J-1
Q23	F-2
Q24	G-1
Q30	K-2
S1	R-1
S2	R-2
S4	L-1
S5	L-2
S6	L-3
S7	K-1
S8	J-3
S9	H-2
S10	H-3
S11	G-2
S12	G-3
S13	F-3
S14	E-2
S15	E-3
S16	C-3
S17	B-3
S18	A-2
S19	D-3
X1	R-3


A
B
C
D
E
F
G
H
J
K
S18
AUDIO MONITOR SELECT
CN710
CN709
CN712
CN708
JW91
R71
JW90
R72
AUTO OFF
D30
R60
STAND BY
D29
JW88
R59
D31
R57
FRAME CODE
JW78
D27
DOLBY
D28
SP
R58
JW72
JW80
JW82
JW73
JW102
JW89
JW105
JW87
JW83
JW84
JW85
JW75
JW76
C6
S17
S16
S19
INPUT SW
JW86
REC MODE SW
JW77
DOLBY SW
LOTNO
DIP
STOP
REW
PLAY
FF
PAUSE
EJECT
JW69
JW70
JW71
C13
R75
S14
C5
L1
JW67
JW100
D26
D23
S15
JW68
D24
D32
R76
D33
JW66
JW63
Q24
R73
CP1
REC
D19
S11
JW57
BT1
1-622-391-43
JW64
JW65
R56
Q23
D25
JW59
D21 PLAY
R53
JW62
JW61
JW60
JW58
S13
S12
D22
R49
R47
JW50
D16 DUB
Q22
DUB
S9
D20
D17
Q20
Q21
Q19
Q18
Q17
JW41
JW40
JW39
JW38
JW37
JW42
JW43
JW35
JW34
JW33
R40
S7
JW51
JW52
C12
R48
IC3
JW44
JW36
KY-105
R66
Q30
R91
D34
JW45
JW49
JW48
JW47
D11 PAUSE
R52
R51
JW53
R54
R50
D18 FF
JW54
R55
JW55
JW56
S10
D13
D12
D15
D14
S8
JW46
R61
R62
R67
C8
R63
R68
C7
CN706
PROGR OPERA

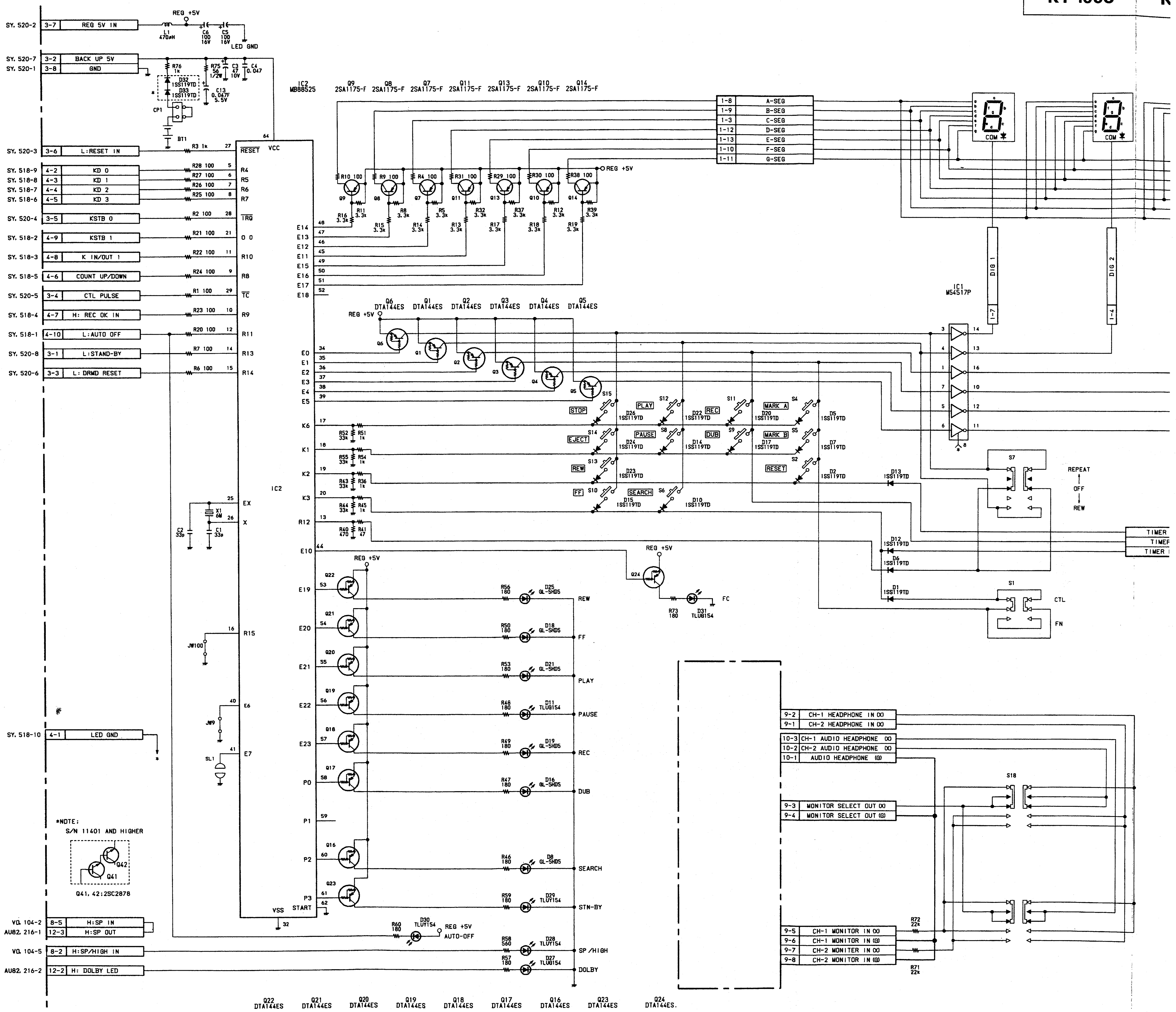

D
E
F
G
H
J
K
L
M
N
P
R
1
2
3
CN708
JW69
R58
D27
D28
SP
DOLBY
JW72
JW73
JW102
JW83
JW84
JW75
JW76
S19
REC MODE SW
DOLBY SW
JW77
C13
R75
D32
D33
R76
JW66
JW63
Q24
R73
CP1
REC
D19
S11
JW57
R49
R47
JW50
D16 DUB
Q22
DUB
S9
Q20
Q21
Q19
Q18
Q17
R40
S14
EJECT
JW70
D24
BT1
C5
L1
C6
JW67
JW64
JW65
R56
Q23
JW100
D25
REW
1-622-391-43
JW59
D21
PLAY
R53
D20
D17
JW42
JW41
JW40
JW39
JW38
JW37
JW35
JW34
JW33
JW43
JW51
JW52
C12
IC3
R48
JW36
JW44
JW45
R52
R51
JW53
R54
R50
JW49
JW48
JW47
D18 FF
D11
PAUSE
JW71
D26
S15
JW68
D23
S13
JW62
JW61
JW60
JW58
S12
D22
JW54
JW55
R55
S10
D13
D12
D15
D14
S8
JW56
DIP
STOP
REW
PLAY
FF
PAUSE
S7
PROGRAM
OPERATION
KY-105C
R66
Q30
R91
D34
R90
R46
JW28
D8
SEARCH
C7
JW46
R61
R62
R67
C8
R63
R68
C9
JW31
C10
R69
R64
R65
R70
C11
D10
CN706
CN705
JW29
S6
JW30
SEARCH
R41
D6
JW107
JW32
D5
Q16
D7
JW23
S4
MARKA
S5
MARKB
JW22
JW19
JW20
JW21
JW18
JW17
C4
C3
JW15
R32
Q11
Q14
R38
R31
Q10
R30
R12
Q13
Q9
R8
Q8
ND701
IC1
R4
S1
JW10
JW9
Q7
D1
FCICTL
IC2
JW4
S2
RESET
Q6
Q1
Q2
Q3
C2
Q4
D2
Q5
X1
CN711
JW13
JW14
R36
JW6
JW5
R27
R26
R25
R24
R23
R22
R21
R20
JW12
R1
R3
C1
R28
JW16
CN704
5
10
JW11
JW7
CN703
8
JW3
JW2
JW1
CN702

KY-105C

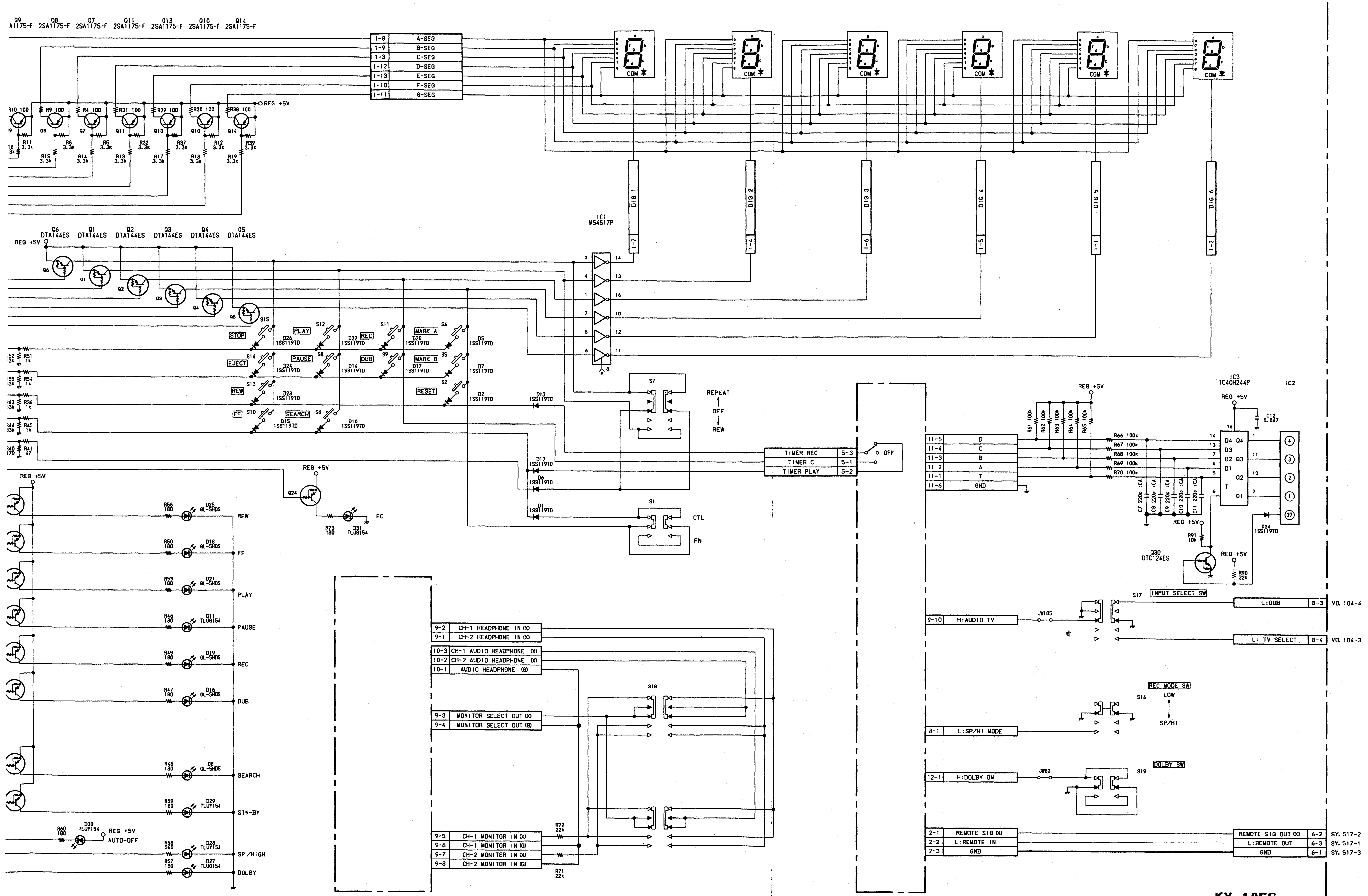
-COMPONENT SIDE-

1-622-391-43
VO-9600P

KY-105C:FUNCTION KEY/DISPLAY
EK;S/N 10401 and higher



SY. 520-2 3-7 REG 5V IN
REG +5V
L1 470mH
C6 100 16V
C5 100 16V
LED GND
SY. 520-7 3-2 BACK UP 5V
SY. 520-1 3-8 GND
R76 1k
D32 1SS119TD
D33 1SS119TD
R75 56 1/2W
C3 47 10V
C4 0.047
C13 0.047F 5.5V
CP1
BT1
IC2 MB88525
Q9 2SA1175-F
Q8 2SA1175-F
Q7 2SA1175-F
Q11 2SA1175-F
Q13 2SA1175-F
Q10 2SA1175-F
Q14 2SA1175-F
SY. 520-3 3-6 L:RESET IN
SY. 518-9 4-2 KD 0
SY. 518-8 4-3 KD 1
SY. 518-7 4-4 KD 2
SY. 518-6 4-5 KD 3
SY. 520-4 3-5 KSTB 0
SY. 518-2 4-9 KSTB 1
SY. 518-3 4-8 K IN/OUT 1
SY. 518-5 4-6 COUNT UP/DOWN
SY. 520-5 3-4 CTL PULSE
SY. 518-4 4-7 H: REC OK IN
SY. 518-1 4-10 L:AUTO OFF
SY. 520-8 3-1 L:STAND-BY
SY. 520-6 3-3 L: DRMD RESET
RESET VCC
R4 R5 R6 R7 IRQ O0 R10 R8 TC R9 R11 R13 R14
E14 E13 E12 E11 E15 E16 E17 E18
E0 E1 E2 E3 E4 E5
K6 K1 K2 K3 R12 E10
E19 E20 E21 E22 E23 P0 P1 P2 P3 START VSS
EX X R15 E6 E7
X1 6M
C2 33p
C1 33p
JW100
JW9
SL1
REG +5V
1-8 A-SEG
1-9 B-SEG
1-3 C-SEG
1-12 D-SEG
1-13 E-SEG
1-10 F-SEG
1-11 G-SEG
COM
DIG 1
DIG 2
1-7
1-4
IC1 M54517P
Q6 DTA144ES
Q1 DTA144ES
Q2 DTA144ES
Q3 DTA144ES
Q4 DTA144ES
Q5 DTA144ES
STOP
PLAY
REC
MARK A
EJECT
PAUSE
DUB
MARK B
REW
RESET
FF
SEARCH
S1 S2 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15
REPEAT
OFF
REW
TIMER
CTL
FN
REW
FF
PLAY
PAUSE
REC
DUB
SEARCH
STN-BY
SP/HIGH
DOLBY
FC
D31 TLUG154
AUTO-OFF
*NOTE:
S/N 11401 AND HIGHER
Q42
Q41
Q41, 42:2SC2878
SY. 518-10 4-1 LED GND
VQ. 104-2 8-5 H:SP IN
AU82. 216-1 12-3 H:SP OUT
VQ. 104-5 8-2 H:SP/HIGH IN
AU82. 216-2 12-2 H: DOLBY LED
9-2 CH-1 HEADPHONE IN (X)
9-1 CH-2 HEADPHONE IN (X)
10-3 CH-1 AUDIO HEADPHONE (X)
10-2 CH-2 AUDIO HEADPHONE (X)
10-1 AUDIO HEADPHONE (G)
9-3 MONITOR SELECT OUT (X)
9-4 MONITOR SELECT OUT (G)
S18
9-5 CH-1 MONITOR IN (X)
9-6 CH-1 MONITOR IN (G)
9-7 CH-2 MONITER IN (X)
9-8 CH-2 MONITOR IN (G)
R72 22k
R71 22k
Q22 DTA144ES
Q21 DTA144ES
Q20 DTA144ES
Q19 DTA144ES
Q18 DTA144ES
Q17 DTA144ES
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES.

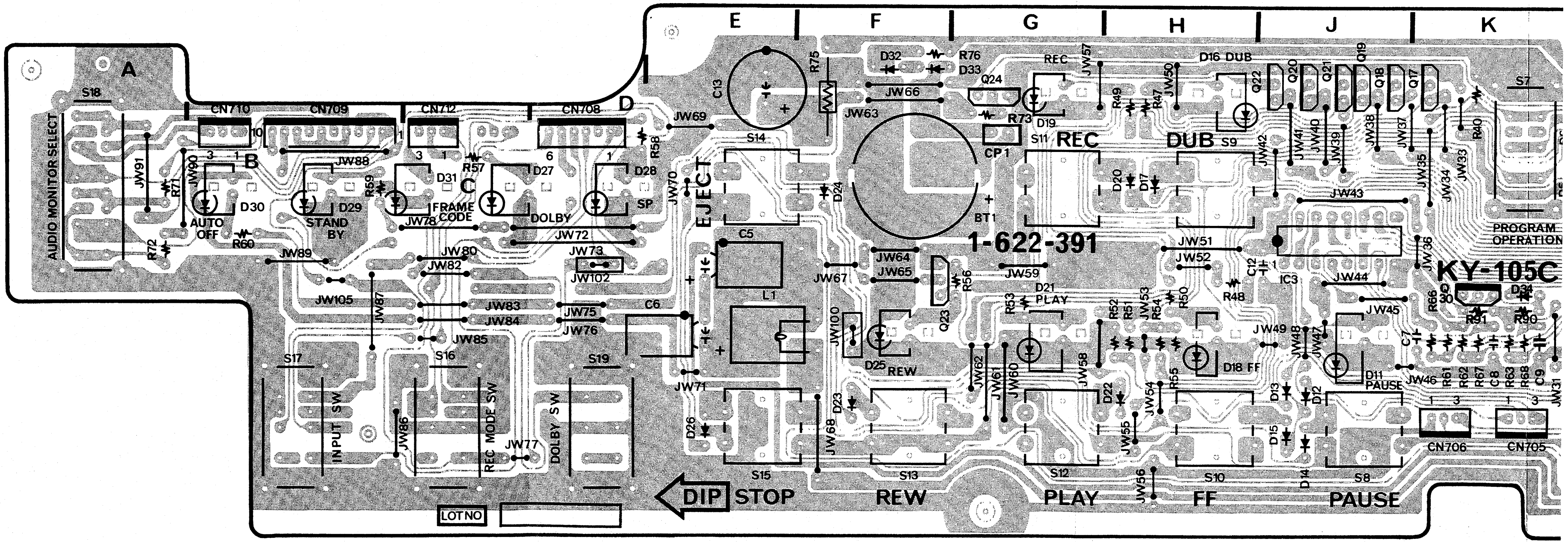

A-SEG
B-SEG
C-SEG
D-SEG
E-SEG
F-SEG
G-SEG
REG +5V
COM
DIG 1
DIG 2
DIG 3
DIG 4
DIG 5
DIG 6
IC1
M54517P
STOP
PLAY
REC
MARK A
EJECT
PAUSE
DUB
MARK B
REW
RESET
FF
SEARCH
REPEAT
OFF
TIMER REC
TIMER C
TIMER PLAY
CTL
FN
FC
IC3
TC40H244P
IC2
INPUT SELECT SW
H:AUDIO TV
L:DUB
L: TV SELECT
VO. 104-4
VO. 104-3
REC MODE SW
LOW
SP/HI
L:SP/HI MODE
DOLBY SW
H:DOLBY ON
REMOTE SIG OO
L:REMOTE IN
GND
REMOTE SIG OUT OO
L:REMOTE OUT
SY. 517-2
SY. 517-1
SY. 517-3
CH-1 HEADPHONE IN OO
CH-2 HEADPHONE IN OO
CH-1 AUDIO HEADPHONE OO
CH-2 AUDIO HEADPHONE OO
AUDIO HEADPHONE (G)
MONITOR SELECT OUT OO
MONITOR SELECT OUT (G)
CH-1 MONITOR IN OO
CH-1 MONITOR IN (G)
CH-2 MONITER IN OO
CH-2 MONITOR IN (G)
AUTO-OFF
STN-BY
SP/HIGH
DOLBY
Q20 DTA144ES
Q19 DTA144ES
Q18 DTA144ES
Q17 DTA144ES
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES.

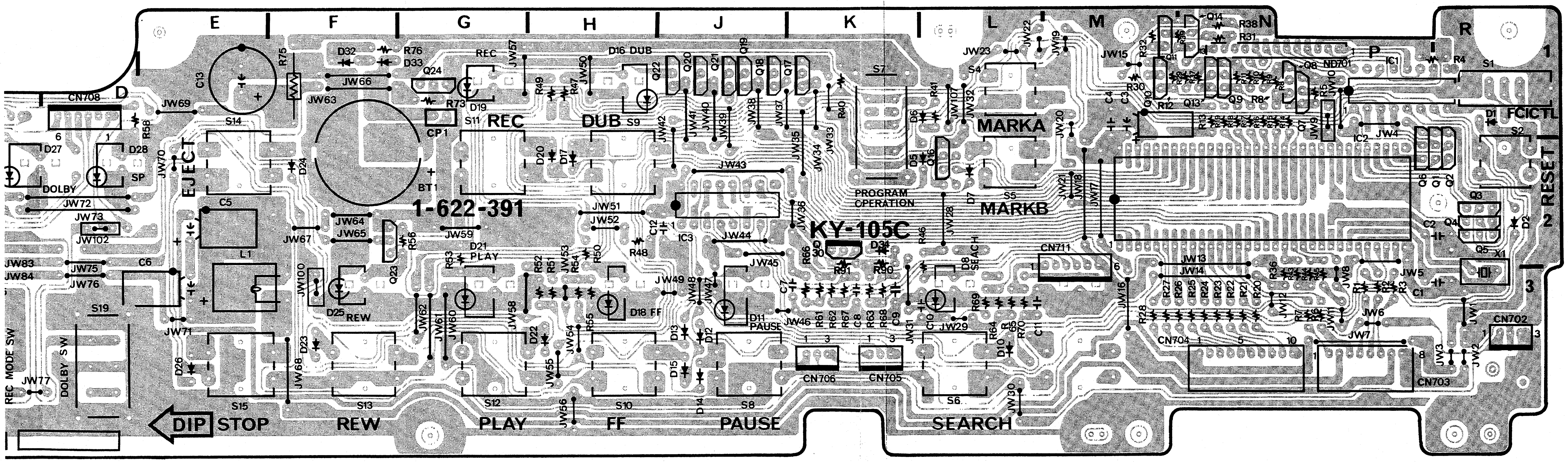
KY-105C
1-622-391-43,44,45
VO-9600P

KY-105C:FUNCTION KEY/DISPLAY
EK;S/N 10801 thru 11400

KY-105C (1-622-391-44)

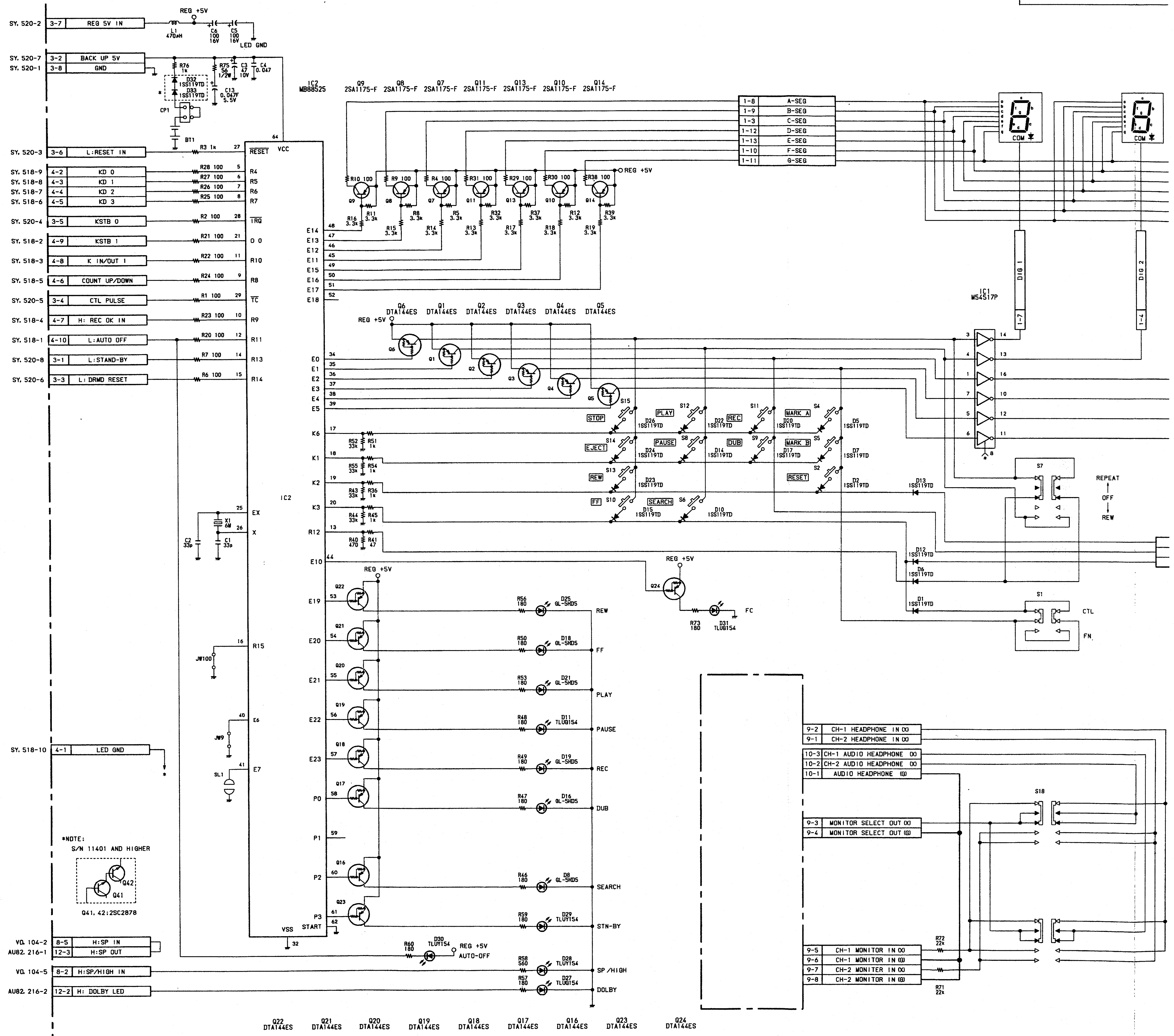
BT1	F-2
CN701	N-1
CN702	R-3
CN703	P-3
CN704	N-3
CN705	K-3
CN706	K-3
CN708	D-1
CN709	B-1
CN710	B-1
CN711	M-3
CN712	C-1
D1	R-1
D2	R-2
D5	L-2
D6	L-1
D7	L-2
D8	L-3
D10	L-3
D11	J-3
D12	J-3
D13	J-3
D14	J-3
D15	J-3
D16	H-1
D17	H-2
D18	H-3
D19	G-1
D20	H-2
D21	G-3
D22	H-3
D23	F-3
D24	F-2
D25	F-3
D26	E-3
D27	C-2
D28	D-2
D29	B-2
D30	B-2
D31	B-2
D32	F-1
D33	F-1
D34	K-2
IC1	P-1
IC2	N-2
IC3	J-2
Q1	R-2
Q2	R-2
Q3	R-2
Q4	R-2
Q5	R-2
Q6	P-2
Q7	N-1
Q8	N-1
Q9	N-1
Q10	M-1
Q11	M-1
Q13	N-1
Q14	N-1
Q16	L-2
Q17	K-1
Q18	J-1
Q19	J-1
Q20	J-1
Q21	J-1
Q22	J-1
Q23	F-2
Q24	G-1
Q30	K-2
S1	R-1
S2	R-2
S4	L-1
S5	L-2
S6	L-3
S7	K-1
S8	J-3
S9	H-2
S10	H-3
S11	G-2
S12	G-3
S13	F-3
S14	E-2
S15	E-3
S16	C-3
S17	B-3
S18	A-2
S19	D-3
X1	R-3

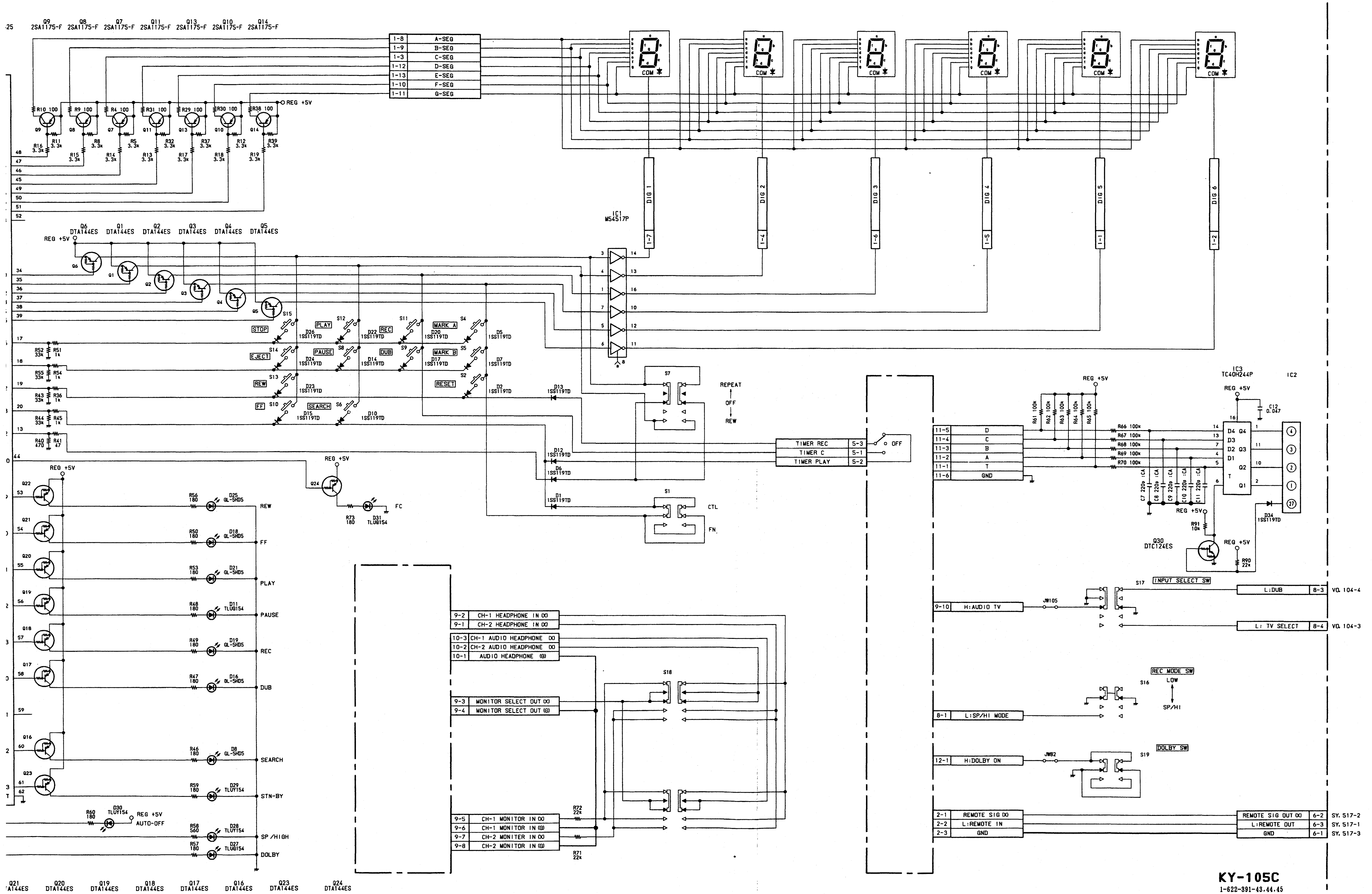

A
B
C
D
E
F
G
H
J
K
AUDIO MONITOR SELECT
CN710
CN709
CN712
CN708
AUTO OFF
STAND BY
FRAME CODE
DOLBY
SP
EJECT
1-622-391
KY-105C
REC
DUB
PLAY
REW
FF
PAUSE
STOP
DIP
PROGRAM OPERATION
INPUT SW
REC MODE SW
DOLBY SW
BT1
IC3
CN706
CN705
LOT NO


E
F
G
H
J
K
L
M
N
P
R
1
2
3
D
CN708
D27
D28
DOLBY
SP
JW72
JW73
JW102
JW83
JW84
JW75
JW76
C6
S19
JW77
REC MODE SW
DOLBY SW
DIP
STOP
S15
S14
EJECT
C13
R75
C5
L1
JW69
JW70
JW71
D24
D26
JW67
JW100
JW68
D23
D25 REW
REW
S13
D32
D33
R76
JW66
JW63
JW64
JW65
BT1
Q23
R56
Q24
R73
D19
CP1
S11 REC
REC
1-622-391
JW59
D21 PLAY
R53
JW62
JW61
JW60
JW58
S12
PLAY
JW57
R49
R47
JW50
D20
D17
D22
R52
R51
JW53
R54
R50
R55
JW54
JW55
JW56
D16 DUB
DUB S9
Q22
JW51
JW52
C12
R48
IC3
D18 FF
S10
FF
Q20
Q21
Q19
Q18
Q17
JW42
JW41
JW40
JW39
JW38
JW37
JW43
JW44
JW45
JW49
JW48
JW47
D13
D12
D15
D14
D11 PAUSE
S8
PAUSE
JW35
JW34
JW33
JW36
R40
R66
R91
R90
D9
C7
JW46
R61
R62
R67
C8
R63
R68
C9
CN706
CN705
KY-105C
S7
PROGRAM OPERATION
R41
JW107
JW32
D6
D5
Q16
D7
JW28
R46
JW31
D8 SEACH
C10
JW29
R69
R64
D10
R65
R70
C11
S6
SEARCH
JW30
JW23
JW22
JW19
S4
MARKA
JW20
JW21
JW18
JW17
S5
MARKB
CN711
JW16
R28
CN704
JW15
R32
Q11
Q14
R38
R31
R39
R30
Q10
R12
Q13
Q9
R8
Q8
ND701
IC1
C4
C3
R13
Q7
JW9
R5
JW10
IC2
JW4
JW13
JW14
R27
R26
R25
R24
R23
R22
R21
R20
R36
JW8
JW12
JW11
R7
R2
D1
D4
R3
JW6
JW7
CN703
JW5
C1
X1
JW1
JW3
JW2
CN702
R4
S1
FC/CTL
S2
RESET
Q6
Q1
Q2
Q3
Q4
C2
Q5
D2

KY-105C
-COMPONENT SIDE-
1-622-391-44
VO-9600P

KY-105C:FUNCTION KEY/DISPLAY
EK;S/N 10401 and higher


REG +5V
REG 5V IN
BACK UP 5V
GND
LED GND
L:RESET IN
KD 0
KD 1
KD 2
KD 3
KSTB 0
KSTB 1
K IN/OUT 1
COUNT UP/DOWN
CTL PULSE
H: REC OK IN
L:AUTO OFF
L:STAND-BY
L: DRWD RESET
IC2
MB88525
IC1
M54517P
A-SEG
B-SEG
C-SEG
D-SEG
E-SEG
F-SEG
G-SEG
COM
DIG 1
DIG 2
STOP
PLAY
REC
MARK A
EJECT
PAUSE
DUB
MARK B
REW
RESET
FF
SEARCH
REPEAT
OFF
CTL
FN
AUTO-OFF
SP/HIGH
DOLBY
STN-BY
H:SP IN
H:SP OUT
H: SP/HIGH IN
H: DOLBY LED
*NOTE:
S/N 11401 AND HIGHER
Q41, 42:2SC2878
CH-1 HEADPHONE IN
CH-2 HEADPHONE IN
CH-1 AUDIO HEADPHONE
CH-2 AUDIO HEADPHONE
AUDIO HEADPHONE
MONITOR SELECT OUT
CH-1 MONITOR IN
CH-2 MONITOR IN
S18
Q22 DTA144ES
Q21 DTA144ES
Q20 DTA144ES
Q19 DTA144ES
Q18 DTA144ES
Q17 DTA144ES
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES


Q9 2SA1175-F
Q8 2SA1175-F
Q7 2SA1175-F
Q11 2SA1175-F
Q13 2SA1175-F
Q10 2SA1175-F
Q14 2SA1175-F
1-8 A-SEG
1-9 B-SEG
1-3 C-SEG
1-12 D-SEG
1-13 E-SEG
1-10 F-SEG
1-11 G-SEG
REG +5V
R10 100
R9 100
R4 100
R31 100
R29 100
R30 100
R38 100
COM
DIG 1
DIG 2
DIG 3
DIG 4
DIG 5
DIG 6
IC1 M54517P
Q6 DTA144ES
Q1 DTA144ES
Q2 DTA144ES
Q3 DTA144ES
Q4 DTA144ES
Q5 DTA144ES
STOP
PLAY
REC
MARK A
EJECT
PAUSE
DUB
MARK B
REW
RESET
FF
SEARCH
S15
S12
S11
S4
S14
S8
S9
S5
S13
S2
S10
S6
S7
REPEAT
OFF
REW
TIMER REC
TIMER C
TIMER PLAY
S-3
S-1
S-2
OFF
S1
CTL
FN
D26 1SS119TD
D22 1SS119TD
D20 1SS119TD
D5 1SS119TD
D24 1SS119TD
D14 1SS119TD
D17 1SS119TD
D7 1SS119TD
D23 1SS119TD
D2 1SS119TD
D13 1SS119TD
D15 1SS119TD
D10 1SS119TD
D12 1SS119TD
D6 1SS119TD
D1 1SS119TD
Q24
R73 180
D31 TLUG154
FC
REW
FF
PLAY
PAUSE
REC
DUB
SEARCH
STN-BY
SP/HIGH
DOLBY
R56 180 D25 GL-5HD5
R50 180 D18 GL-5HD5
R53 180 D21 GL-5HD5
R48 180 D11 TLUG154
R49 180 D19 GL-5HD5
R47 180 D16 GL-5HD5
R46 180 D8 GL-5HD5
R59 180 D29 TLUY154
R58 560 D28 TLUY154
R57 180 D27 TLUG154
R60 180 D30 TLUY154
REG +5V
AUTO-OFF
Q22
Q21
Q20
Q19
Q18
Q17
Q16
Q23
Q21 DTA144ES
Q20 DTA144ES
Q19 DTA144ES
Q18 DTA144ES
Q17 DTA144ES
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES
9-2 CH-1 HEADPHONE IN (X)
9-1 CH-2 HEADPHONE IN (X)
10-3 CH-1 AUDIO HEADPHONE (X)
10-2 CH-2 AUDIO HEADPHONE (X)
10-1 AUDIO HEADPHONE (G)
9-3 MONITOR SELECT OUT (X)
9-4 MONITOR SELECT OUT (G)
S18
9-5 CH-1 MONITOR IN (X)
9-6 CH-1 MONITOR IN (G)
9-7 CH-2 MONITER IN (X)
9-8 CH-2 MONITER IN (G)
R72 22k
R71 22k
11-5 D
11-4 C
11-3 B
11-2 A
11-1 T
11-6 GND
REG +5V
R61 100k
R62 100k
R63 100k
R64 100k
R65 100k
R66 100k
R67 100k
R68 100k
R69 100k
R70 100k
C7 220p
C8 220p
C9 220p
C10 220p
C11 220p
IC3 TC40H244P
IC2
C12 0.047
D4 Q4
D3
D2 Q3
D1
Q2
T
Q1
④
③
②
①
㉗
D34 1SS119TD
R91 10k
Q30 DTC124ES
R90 22k
S17
INPUT SELECT SW
9-10 H:AUDIO TV
JW105
L:DUB 8-3 VO. 104-4
L: TV SELECT 8-4 VO. 104-3
REC MODE SW
S16
LOW
SP/HI
8-1 L:SP/HI MODE
DOLBY SW
S19
12-1 H:DOLBY ON
JW82
2-1 REMOTE SIG (X)
2-2 L:REMOTE IN
2-3 GND
REMOTE SIG OUT (X) 6-2 SY. 517-2
L:REMOTE OUT 6-3 SY. 517-1
GND 6-1 SY. 517-3

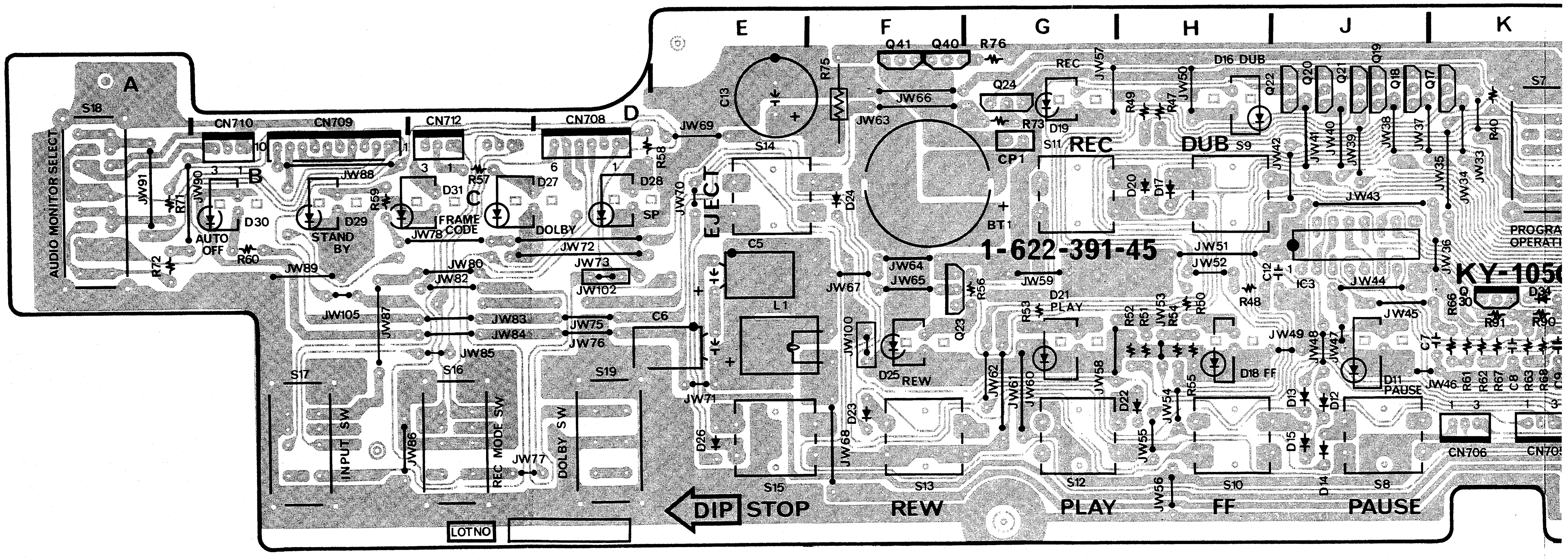
KY-105C

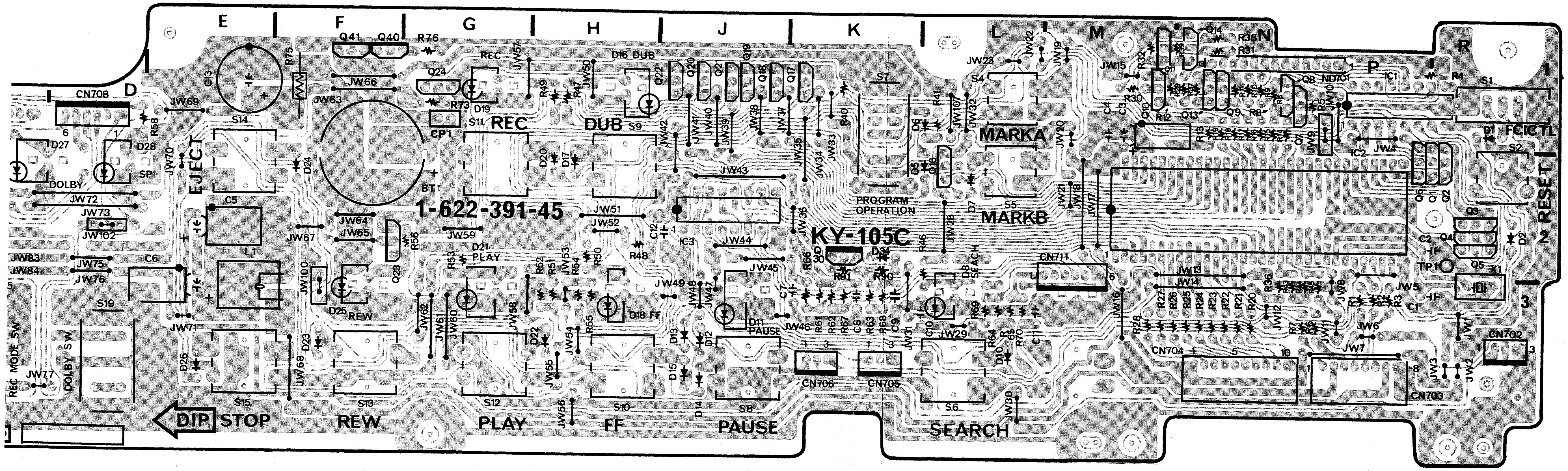
1-622-391-43,44,45
VO-9600P

KY-105C:FUNCTION KEY/DISPLAY
EK;S/N 11401 and higher

KY-105C (1-622-391-45)

BT1	F-2
CN702	R-3
CN703	P-3
CN704	N-3
CN705	K-3
CN706	K-3
CN708	D-1
CN709	B-1
CN710	B-1
CN711	M-3
CN712	C-1
CP1	G-1
D1	R-1
D2	R-2
D5	L-2
D6	L-1
D7	L-2
D8	L-3
D10	L-3
D11	J-3
D12	J-3
D13	J-3
D14	J-3
D15	J-3
D16	H-1
D17	H-2
D18	H-3
D19	G-1
D20	H-2
D21	G-3
D22	H-3
D23	F-3
D24	F-2
D25	F-3
D26	E-3
D27	C-2
D28	D-2
D29	B-2
D30	B-2
D31	B-2
D34	K-2
IC1	P-1
IC2	N-2
IC3	J-2
Q1	R-2
Q2	R-2
Q3	R-2
Q4	R-2
Q5	R-2
Q6	P-2
Q7	N-1
Q8	N-1
Q9	N-1
Q10	M-1
Q11	M-1
Q13	N-1
Q14	N-1
Q16	L-2
Q17	K-1
Q18	J-1
Q19	J-1
Q20	J-1
Q21	J-1
Q22	J-1
Q23	F-2
Q24	G-1
Q30	K-2
Q40	F-1
Q41	F-1
S1	R-1
S2	R-2
S4	L-1
S5	L-2
S6	L-3
S7	K-1
S8	J-3
S9	H-2
S10	H-3
S11	G-2
S12	G-3
S13	F-3
S14	E-2
S15	E-3
S16	C-3
S17	B-3
S18	A-2
S19	D-3
TP1	R-2
X1	R-3


A
B
C
D
E
F
G
H
J
K
AUDIO MONITOR SELECT
CN710
CN709
CN712
CN708
AUTO OFF
STAND BY
FRAME CODE
DOLBY
SP
EJECT
REC
DUB
PLAY
REW
FF
PAUSE
STOP
DIP
1-622-391-45
KY-105
PROGRA OPERATI
INPUT SW
REC MODE SW
DOLBY SW
LOT NO
BT1
IC3
CN706
CN705


E
F
G
H
J
K
L
M
N
P
R
D
1
2
3
CN708
Q41
Q40
R76
Q24
JW66
JW63
JW69
R73
CP1
S11 REC
DUB S9
D16 DUB
REC
D19
Q22
S7
S4
JW23
MARKA
MARKB
S5
PROGRAM OPERATION
KY-105C
1-622-391-45
BT1
C13
R75
S14
EJECT
DOLBY
SP
D27
D28
JW72
JW73
JW102
C5
L1
C6
JW83
JW84
JW75
JW76
S19
JW71
JW77
REC MODE SW
DOLBY SW
D26
S15
JW68
D23
S13
D25 REW
Q23
R56
JW64
JW65
JW67
JW100
JW59
D21 PLAY
S12
JW51
JW52
C12
IC3
R48
D18 FF
S10
JW44
JW45
JW49
D11 PAUSE
S8
JW46
CN706
CN705
D8 SEACH
JW29
S6
CN711
CN704
CN703
CN702
IC1
IC2
ND701
S1
S2
D1
FCICTL
RESET
Q3
Q4
Q5
X1
TP1
C1
C2
D2
JW1
JW2
JW3
JW4
JW5
JW6
JW7
JW13
JW14
JW15
Q8
Q9
Q10
Q11
Q12
Q13
Q14
R31
R36
R4
DIP
STOP
REW
PLAY
FF
PAUSE
SEARCH

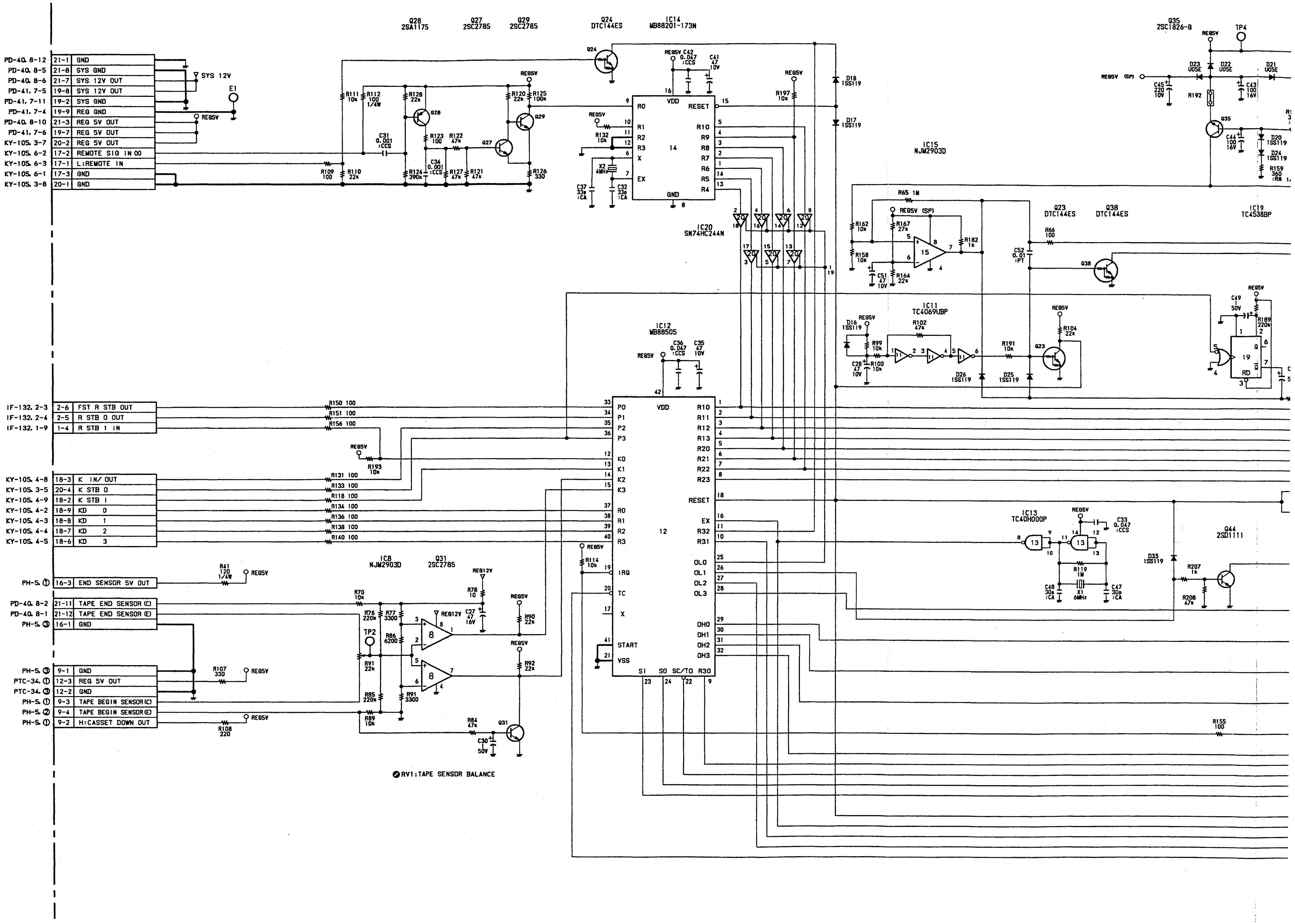
KY-105C

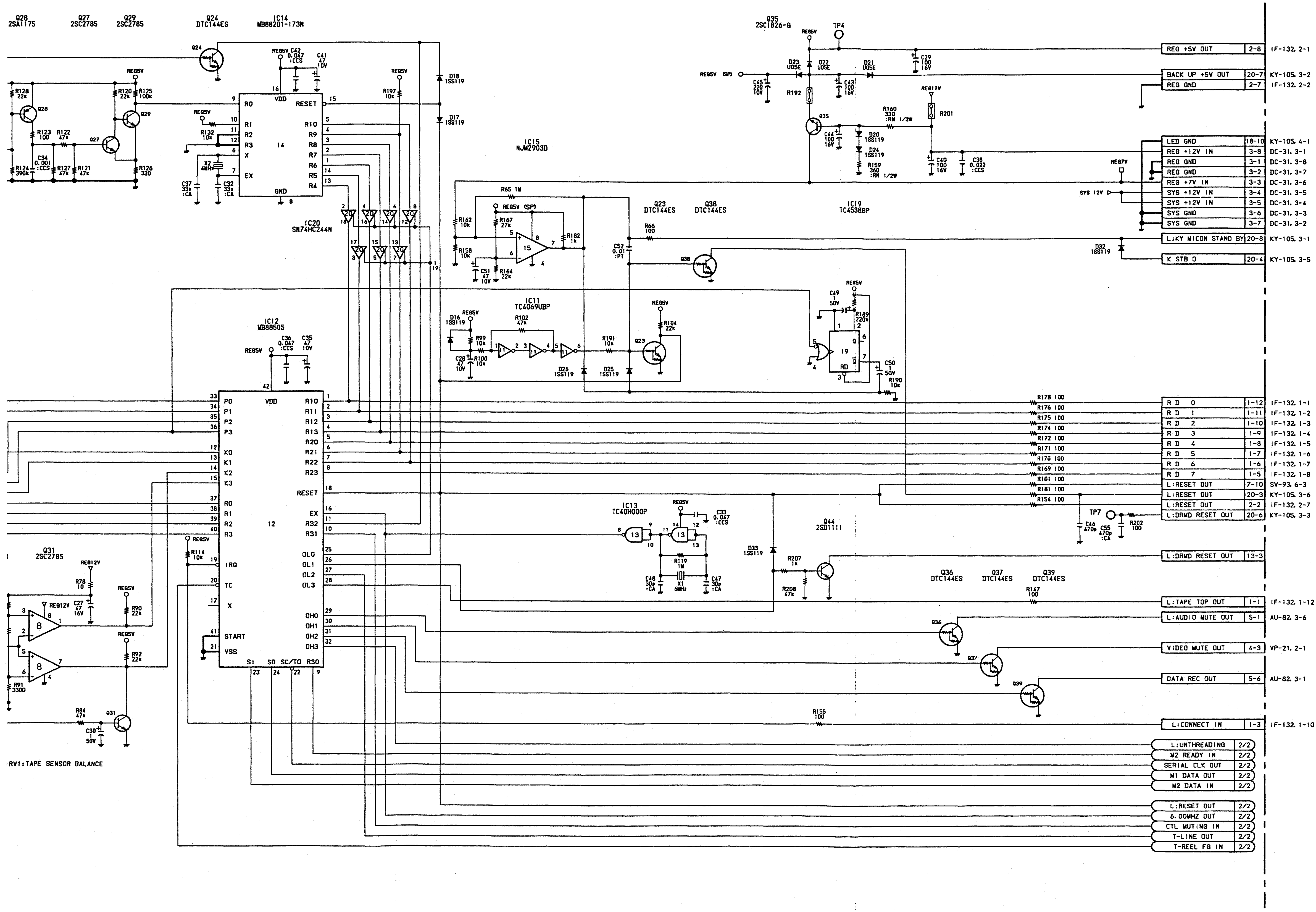
-COMPONENT SIDE-

1-622-391-45

VO-9500P

SY-106(1/2):SYSTEM CONTROL
EK;S/N 10001 thru 10800

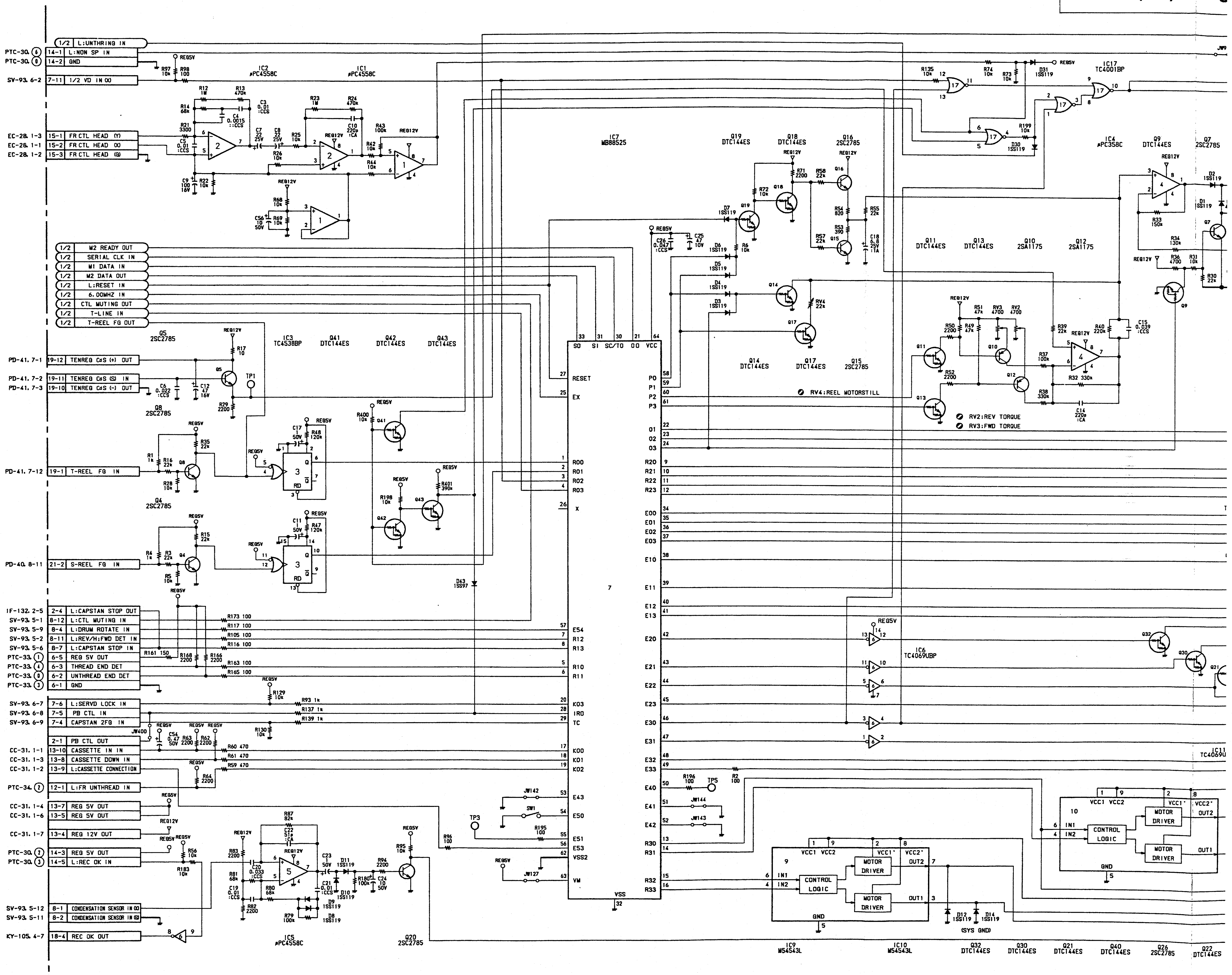

PD-40. 8-12 | 21-1 | GND
PD-40. 8-5 | 21-8 | SYS GND
PD-40. 8-6 | 21-7 | SYS 12V OUT
PD-41. 7-5 | 19-8 | SYS 12V OUT
PD-41. 7-11 | 19-2 | SYS GND
PD-41. 7-4 | 19-9 | REG GND
PD-40. 8-10 | 21-3 | REG 5V OUT
PD-41. 7-6 | 19-7 | REG 5V OUT
KY-105. 3-7 | 20-2 | REG 5V OUT
KY-105. 6-2 | 17-2 | REMOTE SIG IN ∞
KY-105. 6-3 | 17-1 | L:REMOTE IN
KY-105. 6-1 | 17-3 | GND
KY-105. 3-8 | 20-1 | GND
IF-132. 2-3 | 2-6 | FST R STB OUT
IF-132. 2-4 | 2-5 | R STB 0 OUT
IF-132. 1-9 | 1-4 | R STB 1 IN
KY-105. 4-8 | 18-3 | K IN/ OUT
KY-105. 3-5 | 20-4 | K STB 0
KY-105. 4-9 | 18-2 | K STB 1
KY-105. 4-2 | 18-9 | KD 0
KY-105. 4-3 | 18-8 | KD 1
KY-105. 4-4 | 18-7 | KD 2
KY-105. 4-5 | 18-6 | KD 3
PH-5. ① | 16-3 | END SENSOR 5V OUT
PD-40. 8-2 | 21-11 | TAPE END SENSOR (C)
PD-40. 8-1 | 21-12 | TAPE END SENSOR (E)
PH-5. ③ | 16-1 | GND
PH-5. ③ | 9-1 | GND
PTC-34. ① | 12-3 | REG 5V OUT
PTC-34. ③ | 12-2 | GND
PH-5. ① | 9-3 | TAPE BEGIN SENSOR (C)
PH-5. ② | 9-4 | TAPE BEGIN SENSOR (E)
PH-5. ① | 9-2 | H:CASSET DOWN OUT
SYS 12V
E1
REG5V
Q28 2SA1175
Q27 2SC2785
Q29 2SC2785
Q24 DTC144ES
IC14 MB88201-173N
Q35 2SC1826-8
TP4
IC15 NJM2903D
Q23 DTC144ES
Q38 DTC144ES
IC19 TC4538BP
IC20 SN74HC244N
IC11 TC4069UBP
IC12 MB88505
IC13 TC40H000P
Q44 2SD1111
IC8 NJM2903D
Q31 2SC2785
TP2
RV1
X1 6MHz
X2 4MHz
D16 1SS119
D17 1SS119
D18 1SS119
D20 1SS119
D24 1SS119
D25 1SS119
D26 1SS119
D33 1SS119
D21 U05E
D22 U05E
D23 U05E
REG12V
REG5V (SP)
RO VDD RESET R1 R2 R3 X EX GND R10 R9 R8 R7 R6 R5 R4
P0 P1 P2 P3 K0 K1 K2 K3 R0 R1 R2 R3 IRQ TC X START VSS S1 S0 SC/TO R30
VDD R10 R11 R12 R13 R20 R21 R22 R23 RESET EX R32 R31 OL0 OL1 OL2 OL3 OH0 OH1 OH2 OH3
RV1:TAPE SENSOR BALANCE

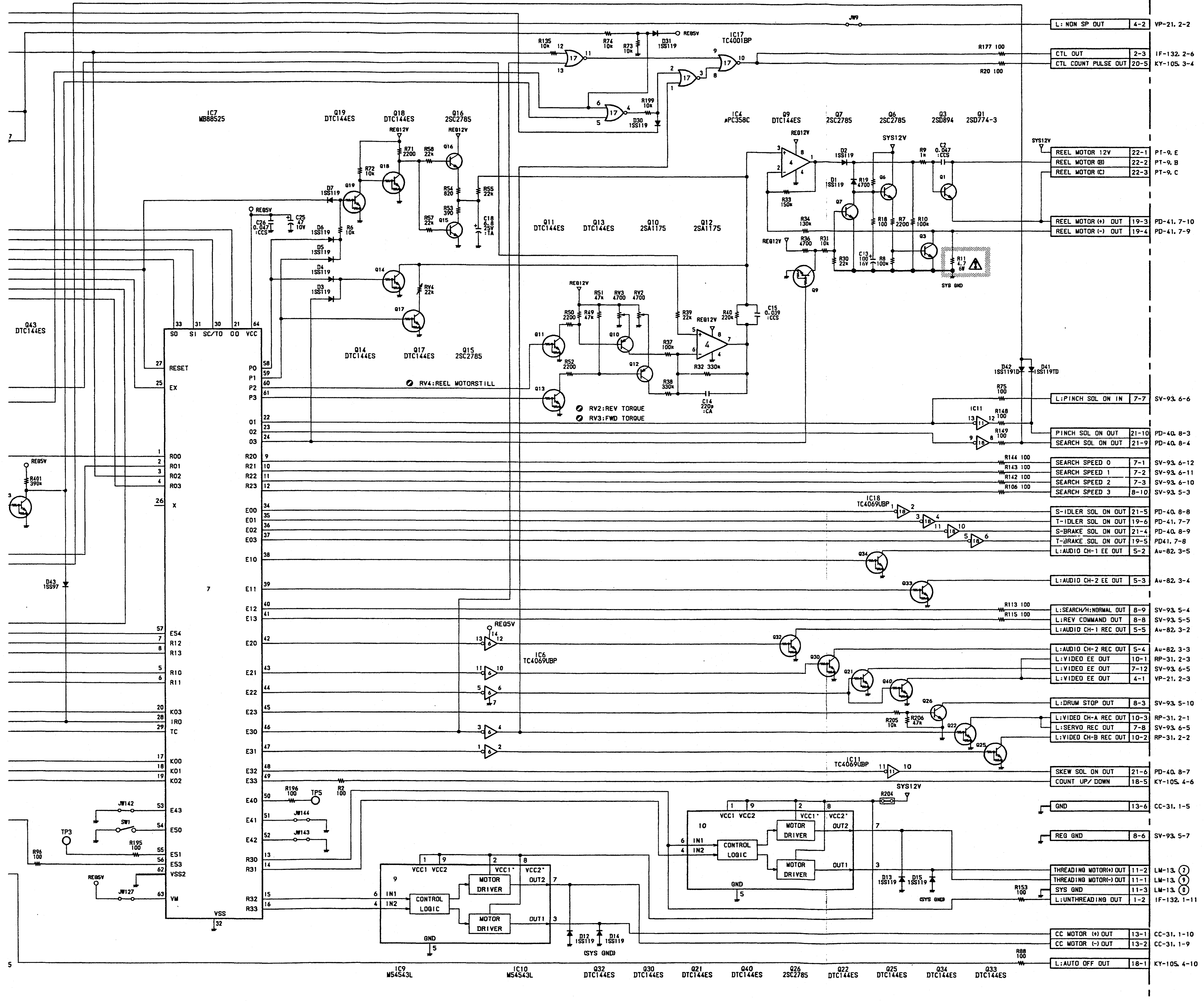

Q28 2SA1175
Q27 2SC2785
Q29 2SC2785
Q24 DTC144ES
IC14 MB88201-173N
IC20 SN74HC244N
IC15 NJM2903D
Q35 2SC1826-Q
TP4
D23 U05E
D22 U05E
D21 U05E
Q23 DTC144ES
Q38 DTC144ES
IC19 TC4538BP
IC11 TC4069UBP
IC12 MB8850S
IC13 TC40H000P
X1 6MHz
X2 4MHz
Q44 2SD1111
Q36 DTC144ES
Q37 DTC144ES
Q39 DTC144ES
Q31 2SC2785
D18 1SS119
D17 1SS119
D32 1SS119
D33 1SS119
REG5V
REG12V
REG7V
SYS 12V
TP7
RV1:TAPE SENSOR BALANCE
REG +5V OUT 2-8 IF-132. 2-1
BACK UP +5V OUT 20-7 KY-105. 3-2
REG GND 2-7 IF-132. 2-2
LED GND 18-10 KY-105. 4-1
REG +12V IN 3-8 DC-31. 3-1
REG GND 3-1 DC-31. 3-8
REG GND 3-2 DC-31. 3-7
REG +7V IN 3-3 DC-31. 3-6
SYS +12V IN 3-4 DC-31. 3-5
SYS +12V IN 3-5 DC-31. 3-4
SYS GND 3-6 DC-31. 3-3
SYS GND 3-7 DC-31. 3-2
L:KY MICON STAND BY 20-8 KY-105. 3-1
K STB 0 20-4 KY-105. 3-5
R D 0 1-12 IF-132. 1-1
R D 1 1-11 IF-132. 1-2
R D 2 1-10 IF-132. 1-3
R D 3 1-9 IF-132. 1-4
R D 4 1-8 IF-132. 1-5
R D 5 1-7 IF-132. 1-6
R D 6 1-6 IF-132. 1-7
R D 7 1-5 IF-132. 1-8
L:RESET OUT 7-10 SV-93. 6-3
L:RESET OUT 20-3 KY-105. 3-6
L:RESET OUT 2-2 IF-132. 2-7
L:DRMD RESET OUT 20-6 KY-105. 3-3
L:DRMD RESET OUT 13-3
L:TAPE TOP OUT 1-1 IF-132. 1-12
L:AUDIO MUTE OUT 5-1 AU-82. 3-6
VIDEO MUTE OUT 4-3 VP-21. 2-1
DATA REC OUT 5-6 AU-82. 3-1
L:CONNECT IN 1-3 IF-132. 1-10
L:UNTHREADING 2/2
M2 READY IN 2/2
SERIAL CLK OUT 2/2
M1 DATA OUT 2/2
M2 DATA IN 2/2
L:RESET OUT 2/2
6.00MHZ OUT 2/2
CTL MUTING IN 2/2
T-LINE OUT 2/2
T-REEL FG IN 2/2

SY-106 (1/2)

1-622-389-12
VO-9600
VO-9600P

SY-106(2/2):SYSTEM CONTROL
EK;S/N 10001 thru 10800


PTC-30 ⑥ 14-1 L:NON SP IN
PTC-30 ⑧ 14-2 GND
SV-93 6-2 7-11 1/2 VD IN 00
1/2 L:UNTHRING IN
EC-28 1-3 15-1 FR CTL HEAD (M)
EC-28 1-1 15-2 FR CTL HEAD (C)
EC-28 1-2 15-3 FR CTL HEAD (G)
IC2 μPC4558C
IC1 μPC4558C
1/2 M2 READY OUT
1/2 SERIAL CLK IN
1/2 M1 DATA IN
1/2 M2 DATA OUT
1/2 L:RESET IN
1/2 6.00MHZ IN
1/2 CTL MUTING OUT
1/2 T-LINE IN
1/2 T-REEL FG OUT
Q5 2SC2785
IC3 TC4538BP
Q41 DTC144ES
Q42 DTC144ES
Q43 DTC144ES
PD-41 7-1 19-12 TENREG C&S (+) OUT
PD-41 7-2 19-11 TENREG C&S (S) IN
PD-41 7-3 19-10 TENREG C&S (-) OUT
TP1
Q8 2SC2785
PD-41 7-12 19-1 T-REEL FG IN
Q4 2SC2785
PD-40 8-11 21-2 S-REEL FG IN
D43 1SS97
IF-132 2-5 2-4 L:CAPSTAN STOP OUT
SV-93 5-1 8-12 L:CTL MUTING IN
SV-93 5-9 8-4 L:DRUM ROTATE IN
SV-93 5-2 8-11 L:REV/H:FWD DET IN
SV-93 5-6 8-7 L:CAPSTAN STOP IN
PTC-33 ① 6-5 REG 5V OUT
PTC-33 ④ 6-3 THREAD END DET
PTC-33 ⑧ 6-2 UNTHREAD END DET
PTC-33 ③ 6-1 GND
SV-93 6-7 7-6 L:SERVO LOCK IN
SV-93 6-8 7-5 PB CTL IN
SV-93 6-9 7-4 CAPSTAN 2FG IN
2-1 PB CTL OUT
CC-31 1-1 13-10 CASSETTE IN IN
CC-31 1-3 13-8 CASSETTE DOWN IN
CC-31 1-2 13-9 L:CASSETTE CONNECTION
PTC-34 ② 12-1 L:FR UNTHREAD IN
CC-31 1-4 13-7 REG 5V OUT
CC-31 1-6 13-5 REG 5V OUT
CC-31 1-7 13-4 REG 12V OUT
PTC-30 ② 14-3 REG 5V OUT
PTC-30 ③ 14-5 L:REC OK IN
SV-93 5-12 8-1 CONDENSATION SENSOR IN (C)
SV-93 5-11 8-2 CONDENSATION SENSOR IN (G)
KY-105 4-7 18-4 REC OK OUT
IC5 μPC4558C
Q20 2SC2785
TP3
IC7 MB88525
SO SI SC/TO OO VCC
RESET
EX
R00 R01 R02 R03
X
E54 R12 R13 R10 R11
K03 IRO TC
K00 K01 K02
E43 E50 E51 E53 VSS2 VM
VSS
P0 P1 P2 P3
O1 O2 O3
R20 R21 R22 R23
E00 E01 E02 E03 E10 E11 E12 E13 E20 E21 E22 E23 E30 E31 E32 E33 E40 E41 E42
R30 R31 R32 R33
TP5
SW1
Q19 DTC144ES
Q18 DTC144ES
Q16 2SC2785
Q14 DTC144ES
Q17 DTC144ES
Q15 2SC2785
RV4:REEL MOTORSTILL
Q11 DTC144ES
Q13 DTC144ES
Q10 2SA1175
Q12 2SA1175
RV2:REV TORQUE
RV3:FWD TORQUE
IC17 TC4001BP
IC4 μPC358C
Q9 DTC144ES
Q7 2SC2785
IC6 TC4069UBP
IC11 TC4069U
IC9 M54543L
IC10 M54543L
VCC1 VCC2
CONTROL LOGIC
MOTOR DRIVER
IN1 IN2
OUT1 OUT2
GND
(SYS GND)
Q32 DTC144ES
Q30 DTC144ES
Q21 DTC144ES
Q40 DTC144ES
Q26 2SC2785
Q22 DTC144ES


IC7 MB88525
IC17 TC4001BP
IC4 μPC358C
IC11 TC4069UBP
IC18 TC4069UBP
IC6 TC4069UBP
IC9 M54543L
IC10 M54543L
CONTROL LOGIC
MOTOR DRIVER
RV4:REEL MOTORSTILL
RV2:REV TORQUE
RV3:FWD TORQUE
REG5V
REG12V
SYS12V
SYS GND
L:NON SP OUT 4-2 VP-21, 2-2
CTL OUT 2-3 IF-132, 2-6
CTL COUNT PULSE OUT 20-5 KY-105, 3-4
REEL MOTOR 12V 22-1 PT-9, E
REEL MOTOR (B) 22-2 PT-9, B
REEL MOTOR (C) 22-3 PT-9, C
REEL MOTOR (+) OUT 19-3 PD-41, 7-10
REEL MOTOR (-) OUT 19-4 PD-41, 7-9
L:PINCH SOL ON IN 7-7 SV-93, 6-6
PINCH SOL ON OUT 21-10 PD-40, 8-3
SEARCH SOL ON OUT 21-9 PD-40, 8-4
SEARCH SPEED 0 7-1 SV-93, 6-12
SEARCH SPEED 1 7-2 SV-93, 6-11
SEARCH SPEED 2 7-3 SV-93, 6-10
SEARCH SPEED 3 8-10 SV-93, 5-3
S-IDLER SOL ON OUT 21-5 PD-40, 8-8
T-IDLER SOL ON OUT 19-6 PD-41, 7-7
S-BRAKE SOL ON OUT 21-4 PD-40, 8-9
T-BRAKE SOL ON OUT 19-5 PD41, 7-8
L:AUDIO CH-1 EE OUT 5-2 Au-82, 3-5
L:AUDIO CH-2 EE OUT 5-3 Au-82, 3-4
L:SEARCH/H:NORMAL OUT 8-9 SV-93, 5-4
L:REV COMMAND OUT 8-8 SV-93, 5-5
L:AUDIO CH-1 REC OUT 5-5 Au-82, 3-2
L:AUDIO CH-2 REC OUT 5-4 Au-82, 3-3
L:VIDEO EE OUT 10-1 RP-31, 2-3
L:VIDEO EE OUT 7-12 SV-93, 6-5
L:VIDEO EE OUT 4-1 VP-21, 2-3
L:DRUM STOP OUT 8-3 SV-93, 5-10
L:VIDEO CH-A REC OUT 10-3 RP-31, 2-1
L:SERVO REC OUT 7-8 SV-93, 6-5
L:VIDEO CH-B REC OUT 10-2 RP-31, 2-2
SKEW SOL ON OUT 21-6 PD-40, 8-7
COUNT UP/ DOWN 18-5 KY-105, 4-6
GND 13-6 CC-31, 1-5
REG GND 8-6 SV-93, 5-7
THREADING MOTOR(+) OUT 11-2 LM-13, ②
THREADING MOTOR(-) OUT 11-1 LM-13, ⑨
SYS GND 11-3 LM-13, ⑧
L:UNTHREADING OUT 1-2 IF-132, 1-11
CC MOTOR (+) OUT 13-1 CC-31, 1-10
CC MOTOR (-) OUT 13-2 CC-31, 1-9
L:AUTO OFF OUT 18-1 KY-105, 4-10
Q32 DTC144ES
Q30 DTC144ES
Q21 DTC144ES
Q40 DTC144ES
Q26 2SC2785
Q22 DTC144ES
Q25 DTC144ES
Q34 DTC144ES
Q33 DTC144ES

SY-106 (2/2)

1-622-389-12
VO-9600
VO-9600P

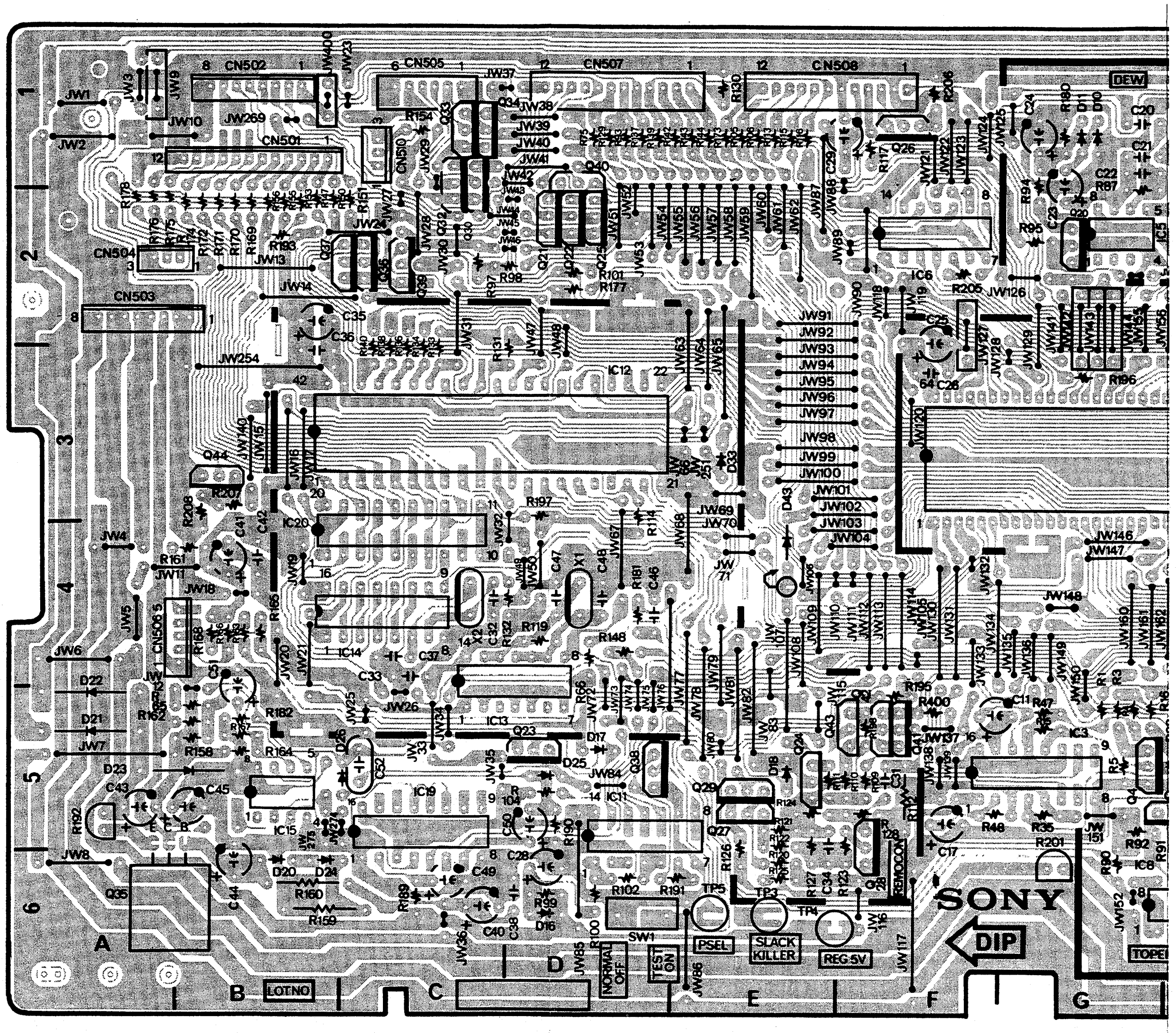
NOTE;

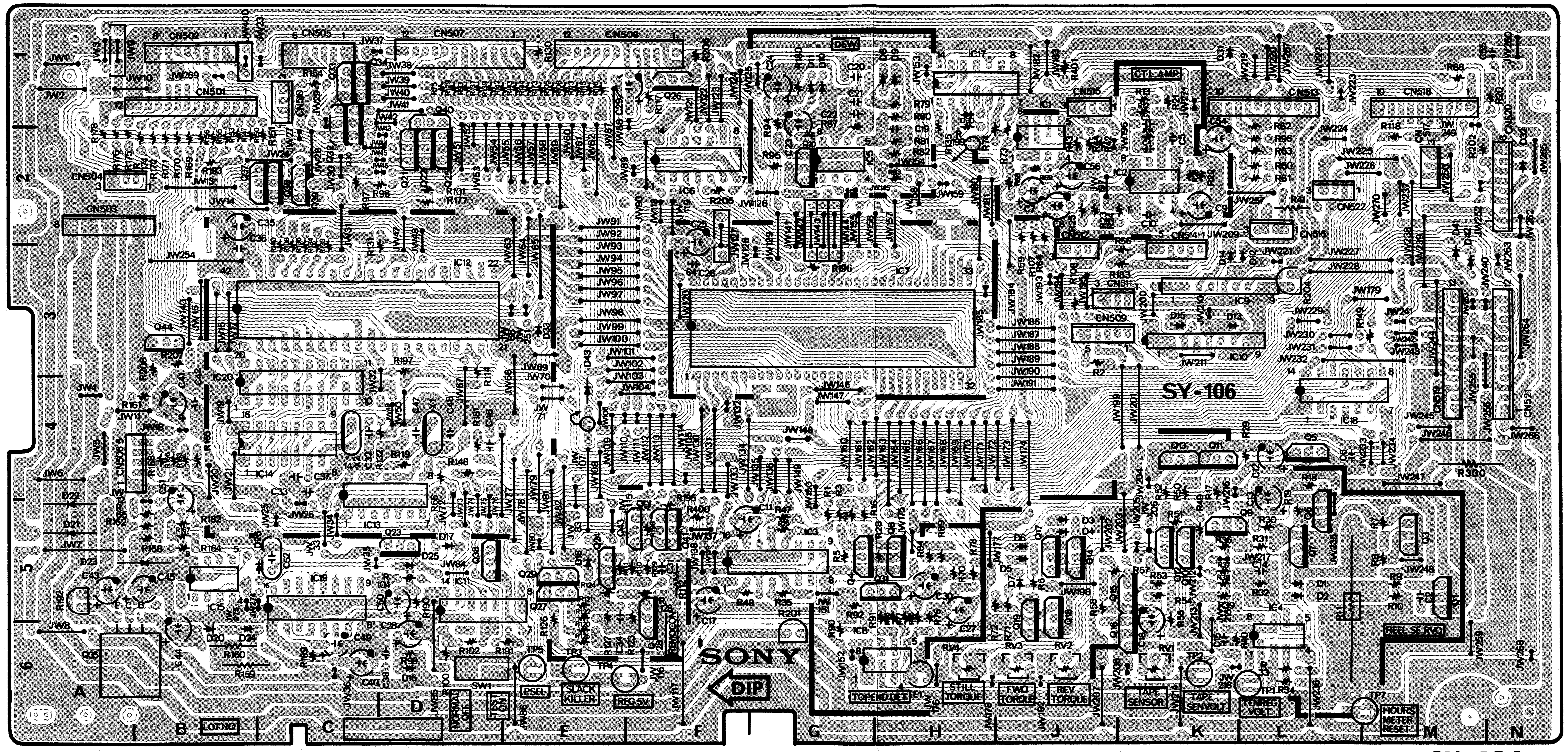
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

SY-106:SYSTEM CONTROL
EK;S/N 10001 thru 10800

SY-106 (1-622-389-12)

CN501	B-1
CN502	B-1
CN503	A-2
CN504	A-2
CN505	C-1
CN506	B-4
CN507	D-1
CN508	E-1
CN509	J-3
CN510	C-1
CN511	J-3
CN512	J-3
CN513	L-1
CN514	K-3
CN515	J-1
CN516	L-2
CN517	M-2
CN518	M-1
CN519	M-3
CN520	N-2
CN521	N-3
CN522	L-2
D1	L-5
D2	L-5
D3	J-5
D4	J-5
D5	J-5
D6	J-5
D7	J-5
D8	H-1
D9	H-1
D10	G-1
D11	G-1
D12	L-3
D13	K-3
D14	K-3
D15	K-3
D16	D-6
D17	D-5
D18	E-5
D20	B-6
D21	A-5
D22	A-5
D23	B-5
D24	B-6
D25	D-5
D26	C-5
D30	H-1
D31	K-1
D32	N-2
D33	E-3
D41	M-3
D42	M-3
D43	E-4
E1	H-6
IC1	J-2
IC2	K-2
IC3	G-5
IC4	L-6
IC5	G-2
IC6	F-2
IC7	G-3
IC8	H-6
IC9	K-3
IC10	K-3
IC11	D-5
IC12	C-3
IC13	D-4
IC14	C-4
IC15	B-5
IC17	H-1
IC18	L-4
IC19	C-5
IC20	C-4
Q1	M-5
Q3	M-5
Q4	G-5
Q5	L-4
Q6	L-5
Q7	L-5
Q8	H-5
Q9	K-5
Q10	K-5
Q11	K-4
Q12	K-5
Q13	K-4
Q14	J-5
Q15	K-5
Q16	K-6
Q17	J-5
Q18	J-5
Q19	J-5
Q20	G-2
Q21	D-2
Q22	D-2
Q23	D-5
Q24	E-5
Q25	D-2
Q26	F-1
Q27	E-5
Q28	F-5
Q29	E-5
Q30	C-1
Q31	H-5
Q32	C-1
Q33	C-1
Q34	C-1
Q35	A-6
Q36	C-2
Q37	B-2
Q38	D-5
Q39	C-2
Q40	D-1
Q41	F-5
Q42	F-5
Q43	F-5
Q44	B-3
RV1	K-6
RV2	J-6
RV3	J-6
RV4	H-6
SW1	D-6
TP1	L-6
TP2	K-6
TP3	E-6
TP4	F-6
TP5	E-6
TP7	M-6
X1	D-4
X2	C-4


CN502
CN505
CN507
CN508
DEW
CN501
CN504
CN503
IC12
IC6
IC20
IC14
IC13
IC19
IC15
IC11
SONY
DIP
LOTNO
NORMAL OFF
TEST ON
PSEL
SLACK KILLER
REG 5V
SW1
TP5
TP3
TP4
A
B
C
D
E
F
G
1
2
3
4
5
6

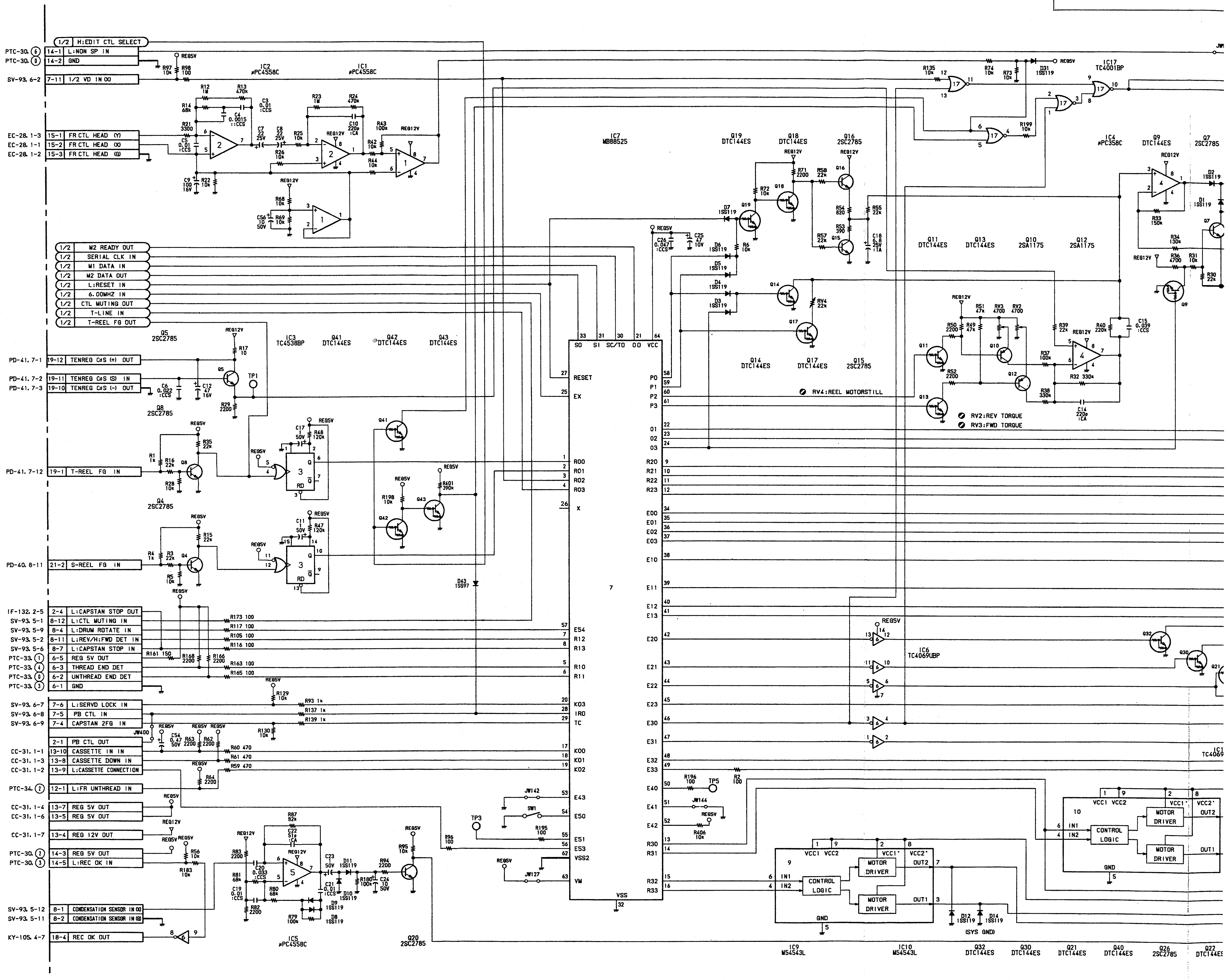

CN502
CN505
CN507
CN508
CN501
CN503
CN504
DEW
IC17
CTL AMP
CN513
CN518
CN515
CN512
CN514
CN516
CN522
CN511
CN509
CN519
CN520
CN521
IC12
IC6
IC7
IC20
IC14
IC13
IC19
IC15
IC11
IC3
IC8
IC4
IC9
IC10
IC18
SY-106
SONY
DIP
LOT NO
NORMAL OFF
TEST ON
SW1
PSEL
SLACK KILLER
REG 5V
REMOCON
TOPEND DET
STILL TORQUE
FWD TORQUE
REV TORQUE
TAPE SENSOR
TAPE SENVOLT
TENREG VOLT
HOURS METER RESET
REEL SE RVO
RV1
RV2
RV3
RV4
TP1
TP2
TP3
TP4
TP5
TP7
1
2
3
4
5
6
A
B
C
D
E
F
G
H
J
K
L
M
N

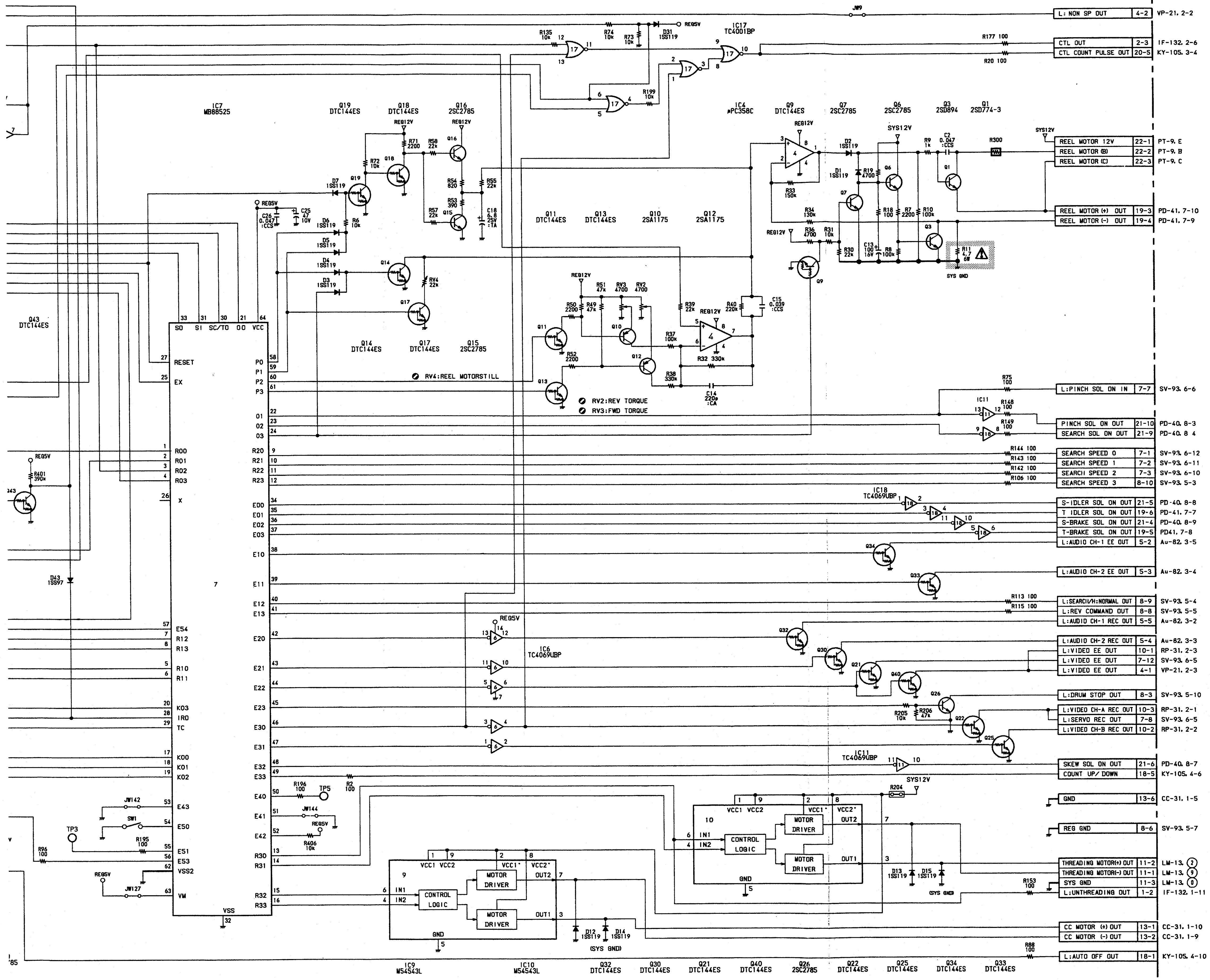
SY-106

-COMPONENT SIDE-

1-622-389-12
VO-9600
VO-9600P

SY-106(2/2):SYSTEM CONTROL
EK;S/N 10801 and higher


1/2 H:EDIT CTL SELECT
PTC-30, 6 14-1 L:NON SP IN
PTC-30, 9 14-2 GND
SV-93, 6-2 7-11 1/2 VD IN (H)
EC-28, 1-3 15-1 FR CTL HEAD (Y)
EC-28, 1-1 15-2 FR CTL HEAD (X)
EC-28, 1-2 15-3 FR CTL HEAD (G)
1/2 M2 READY OUT
1/2 SERIAL CLK IN
1/2 M1 DATA IN
1/2 M2 DATA OUT
1/2 L:RESET IN
1/2 6.00MHZ IN
1/2 CTL MUTING OUT
1/2 T-LINE IN
1/2 T-REEL FG OUT
PD-41, 7-1 19-12 TENREG C(S (+) OUT
PD-41, 7-2 19-11 TENREG C(S (S) IN
PD-41, 7-3 19-10 TENREG C(S (-) OUT
PD-41, 7-12 19-1 T-REEL FG IN
PD-40, 8-11 21-2 S-REEL FG IN
IF-132, 2-5 2-4 L:CAPSTAN STOP OUT
SV-93, 5-1 8-12 L:CTL MUTING IN
SV-93, 5-9 8-4 L:DRUM ROTATE IN
SV-93, 5-2 8-11 L:REV/H:FWD DET IN
SV-93, 5-6 8-7 L:CAPSTAN STOP IN
PTC-33, 1 6-5 REG 5V OUT
PTC-33, 4 6-3 THREAD END DET
PTC-33, 8 6-2 UNTHREAD END DET
PTC-33, 3 6-1 GND
SV-93, 6-7 7-6 L:SERVO LOCK IN
SV-93, 6-8 7-5 PB CTL IN
SV-93, 6-9 7-4 CAPSTAN 2FG IN
2-1 PB CTL OUT
CC-31, 1-1 13-10 CASSETTE IN IN
CC-31, 1-3 13-8 CASSETTE DOWN IN
CC-31, 1-2 13-9 L:CASSETTE CONNECTION
PTC-34, 2 12-1 L:FR UNTHREAD IN
CC-31, 1-4 13-7 REG 5V OUT
CC-31, 1-6 13-5 REG 5V OUT
CC-31, 1-7 13-4 REG 12V OUT
PTC-30, 2 14-3 REG 5V OUT
PTC-30, 3 14-5 L:REC OK IN
SV-93, 5-12 8-1 CONDENSATION SENSOR IN (X)
SV-93, 5-11 8-2 CONDENSATION SENSOR IN (G)
KY-105, 4-7 18-4 REC OK OUT
IC2 µPC4558C
IC1 µPC4558C
IC3 TC4538BP
IC5 µPC4558C
IC7 MB88525
IC17 TC4001BP
IC4 µPC358C
IC6 TC4069UBP
IC9 M54543L
IC10 M54543L
Q5 2SC2785
Q8 2SC2785
Q4 2SC2785
Q41 DTC144ES
Q42 DTC144ES
Q43 DTC144ES
Q19 DTC144ES
Q18 DTC144ES
Q16 2SC2785
Q14 DTC144ES
Q17 DTC144ES
Q15 2SC2785
Q11 DTC144ES
Q13 DTC144ES
Q10 2SA1175
Q12 2SA1175
Q9 DTC144ES
Q7 2SC2785
Q20 2SC2785
Q32 DTC144ES
Q30 DTC144ES
Q21 DTC144ES
Q40 DTC144ES
Q26 2SC2785
Q22 DTC144ES
RV4:REEL MOTORSTILL
RV2:REV TORQUE
RV3:FWD TORQUE
TP1
TP3
TP5
REG5V
REG12V
SO SI SC/TO OO VCC
RESET
EX
P0 P1 P2 P3
O1 O2 O3
RO0 RO1 RO2 RO3
R20 R21 R22 R23
X
E00 E01 E02 E03 E10 E11 E12 E13 E20 E21 E22 E23 E30 E31 E32 E33 E40 E41 E42
R30 R31 R32 R33
E54 R12 R13 R10 R11
K03 IR0 TC
K00 K01 K02
E43 E50 E51 E53 VSS2 VM
VSS
VCC1 VCC2
CONTROL LOGIC
MOTOR DRIVER
OUT1 OUT2
IN1 IN2
GND
(SYS GND)
JW142 SW1 JW127 JW144 JW400


IC7
MB88525
IC17
TC4001BP
IC4
µPC358C
IC18
TC4069UBP
IC6
TC4069UBP
IC11
TC4069UBP
IC9
M54543L
IC10
M54543L
CONTROL LOGIC
MOTOR DRIVER
RV4:REEL MOTORSTILL
RV2:REV TORQUE
RV3:FWD TORQUE
SYS GND
L: NON SP OUT 4-2 VP-21, 2-2
CTL OUT 2-3 IF-132, 2-6
CTL COUNT PULSE OUT 20-5 KY-105, 3-4
REEL MOTOR 12V 22-1 PT-9, E
REEL MOTOR (B) 22-2 PT-9, B
REEL MOTOR (C) 22-3 PT-9, C
REEL MOTOR (+) OUT 19-3 PD-41, 7-10
REEL MOTOR (-) OUT 19-4 PD-41, 7-9
L:PINCH SOL ON IN 7-7 SV-93, 6-6
PINCH SOL ON OUT 21-10 PD-40, 8-3
SEARCH SOL ON OUT 21-9 PD-40, 8-4
SEARCH SPEED 0 7-1 SV-93, 6-12
SEARCH SPEED 1 7-2 SV-93, 6-11
SEARCH SPEED 2 7-3 SV-93, 6-10
SEARCH SPEED 3 8-10 SV-93, 5-3
S-IDLER SOL ON OUT 21-5 PD-40, 8-8
T IDLER SOL ON OUT 19-6 PD-41, 7-7
S-BRAKE SOL ON OUT 21-4 PD-40, 8-9
T-BRAKE SOL ON OUT 19-5 PD41, 7-8
L:AUDIO CH-1 EE OUT 5-2 Au-82, 3-5
L:AUDIO CH-2 EE OUT 5-3 Au-82, 3-4
L:SEARCH/H:NORMAL OUT 8-9 SV-93, 5-4
L:REV COMMAND OUT 8-8 SV-93, 5-5
L:AUDIO CH-1 REC OUT 5-5 Au-82, 3-2
L:AUDIO CH-2 REC OUT 5-4 Au-82, 3-3
L:VIDEO EE OUT 10-1 RP-31, 2-3
L:VIDEO EE OUT 7-12 SV-93, 6-5
L:VIDEO EE OUT 4-1 VP-21, 2-3
L:DRUM STOP OUT 8-3 SV-93, 5-10
L:VIDEO CH-A REC OUT 10-3 RP-31, 2-1
L:SERVO REC OUT 7-8 SV-93, 6-5
L:VIDEO CH-B REC OUT 10-2 RP-31, 2-2
SKEW SOL ON OUT 21-6 PD-40, 8-7
COUNT UP/ DOWN 18-5 KY-105, 4-6
GND 13-6 CC-31, 1-5
REG GND 8-6 SV-93, 5-7
THREADING MOTOR(+) OUT 11-2 LM-13, ②
THREADING MOTOR(-) OUT 11-1 LM-13, ⑨
SYS GND 11-3 LM-13, ⑧
L:UNTHREADING OUT 1-2 IF-132, 1-11
CC MOTOR (+) OUT 13-1 CC-31, 1-10
CC MOTOR (-) OUT 13-2 CC-31, 1-9
L:AUTO OFF OUT 18-1 KY-105, 4-10

SY-106 (2/2)
1-622-389-13
VO-9600
VO-9600P

NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

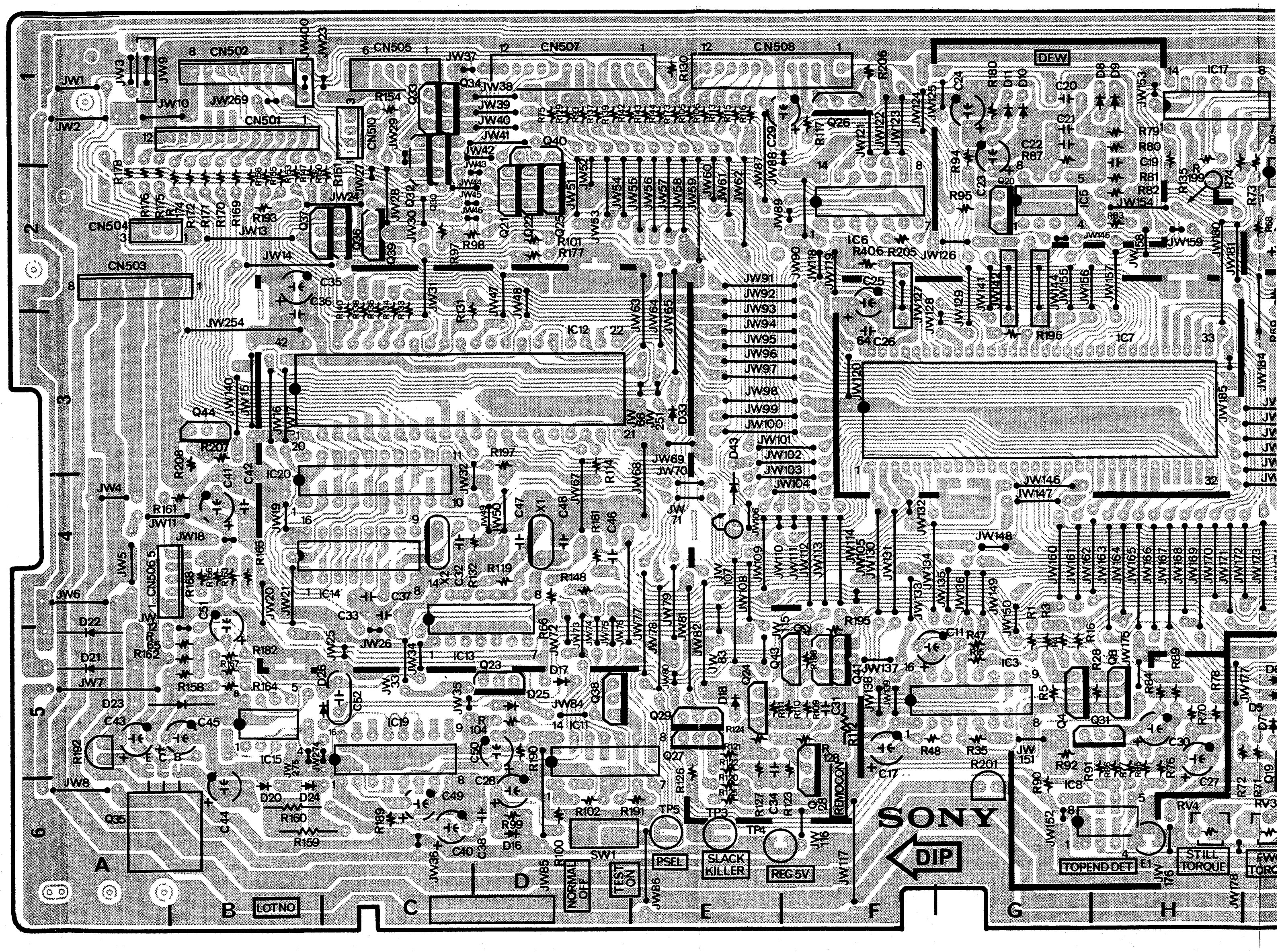
SY-106:SYSTEM CONTROL
EK;S/N 10801 and higher

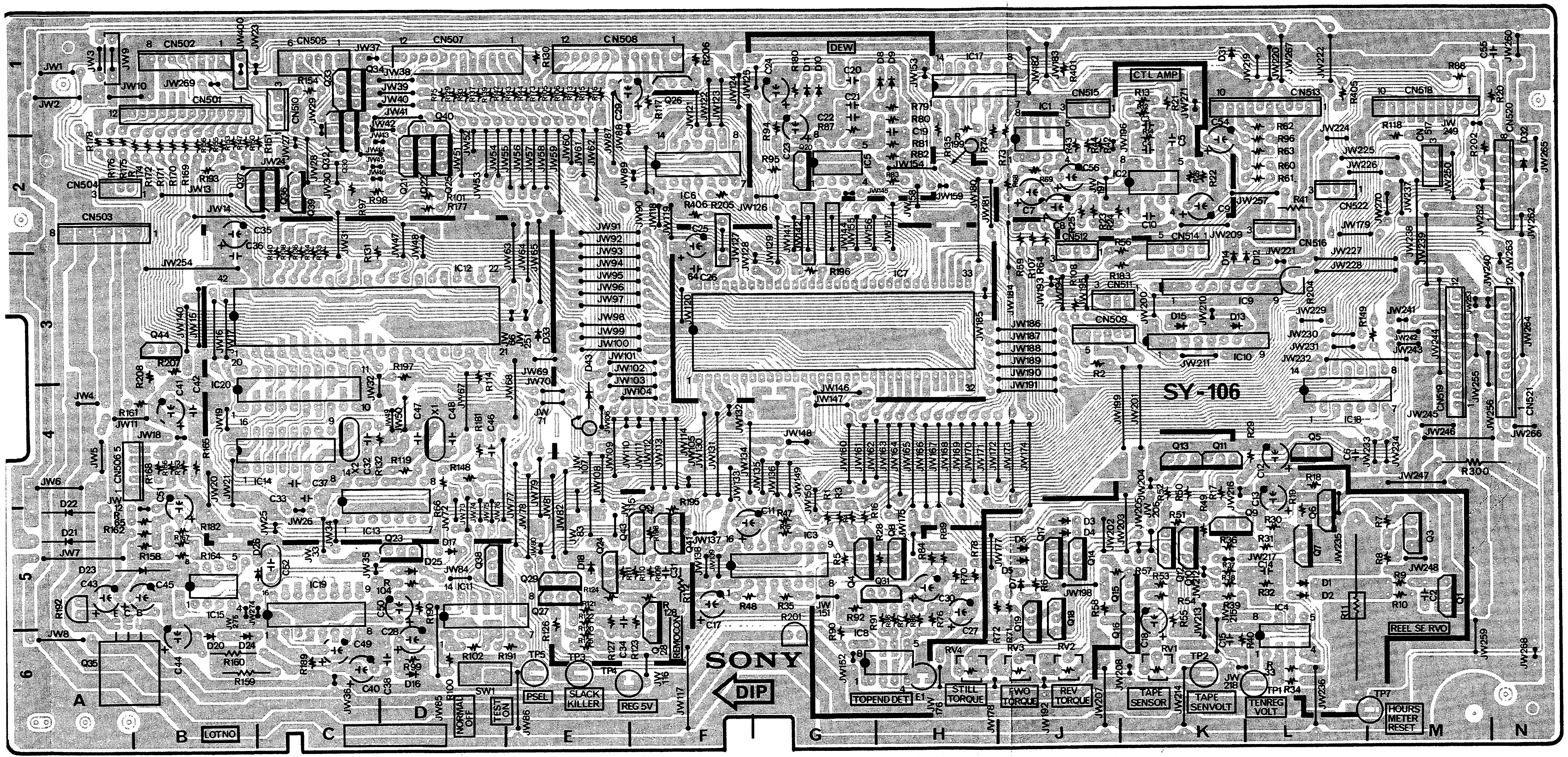
SY-106 (1-622-389-13)

CN501	B-1
CN502	B-1
CN503	A-2
CN504	A-2
CN505	C-1
CN506	B-4
CN507	D-1
CN508	E-1
CN509	J-3
CN510	C-1
CN511	J-3
CN512	J-3
CN513	L-1
CN514	K-3
CN515	J-1
CN516	L-2
CN517	M-2
CN518	M-1
CN519	M-3
CN520	N-2
CN521	N-3
CN522	L-2
D1	L-5
D2	L-5
D3	J-5
D4	J-5
D5	J-5
D6	J-5
D7	J-5
D8	H-1
D9	H-1
D10	G-1
D11	G-1
D12	L-3
D13	K-3
D14	K-3
D15	K-3
D16	D-6
D17	D-5
D18	E-5
D20	B-6
D21	A-5
D22	A-5
D23	B-5
D24	B-6
D25	D-5
D26	C-5
D31	K-1
D32	N-2
D33	E-3
D43	E-4
E1	H-6

IC1	J-2
IC2	K-2
IC3	G-5
IC4	L-6
IC5	G-2
IC6	F-2
IC7	G-3
IC8	H-6
IC9	K-3
IC10	K-3
IC11	D-5
IC12	D-3
IC13	D-4
IC14	C-4
IC15	B-5
IC17	H-1
IC18	L-4
IC19	C-5
IC20	C-4
Q1	M-5
Q3	M-5
Q4	G-5
Q5	L-4
Q6	L-5
Q7	L-5
Q8	H-5
Q9	K-5
Q10	K-5
Q11	K-4
Q12	K-5
Q13	K-4
Q14	J-5
Q15	K-5
Q16	K-6
Q17	J-5
Q18	J-5
Q19	J-5
Q20	G-2
Q21	D-2
Q22	D-2
Q23	D-5
Q24	E-5
Q25	D-2
Q26	F-1
Q27	E-5
Q28	F-5
Q29	E-5
Q30	C-1
Q31	H-5
Q32	C-1
Q33	C-1
Q34	C-1
Q35	A-6
Q36	C-2

Q37	C-2
Q38	D-5
Q39	C-2
Q40	D-1
Q41	F-5
Q42	F-5
Q43	F-5
Q44	B-3
RV1	K-6
RV2	J-6
RV3	J-6
RV4	H-6
SW1	D-6
TP1	L-6
TP2	K-6
TP3	E-6
TP4	E-6
TP5	E-6
TP7	M-6
X1	D-4
X2	C-4


CN502
CN505
CN507
CN508
CN501
CN503
CN504
CN510
DEW
IC17
IC12
IC7
IC20
IC14
IC13
IC19
IC15
IC11
IC3
IC8
X1
SONY
DIP
NORMAL OFF
TEST ON
PSEL
SLACK KILLER
REG 5V
TOPEND DET
STILL TORQUE
LOTNO
REMOCON
A
B
C
D
E
F
G
H
1
2
3
4
5
6

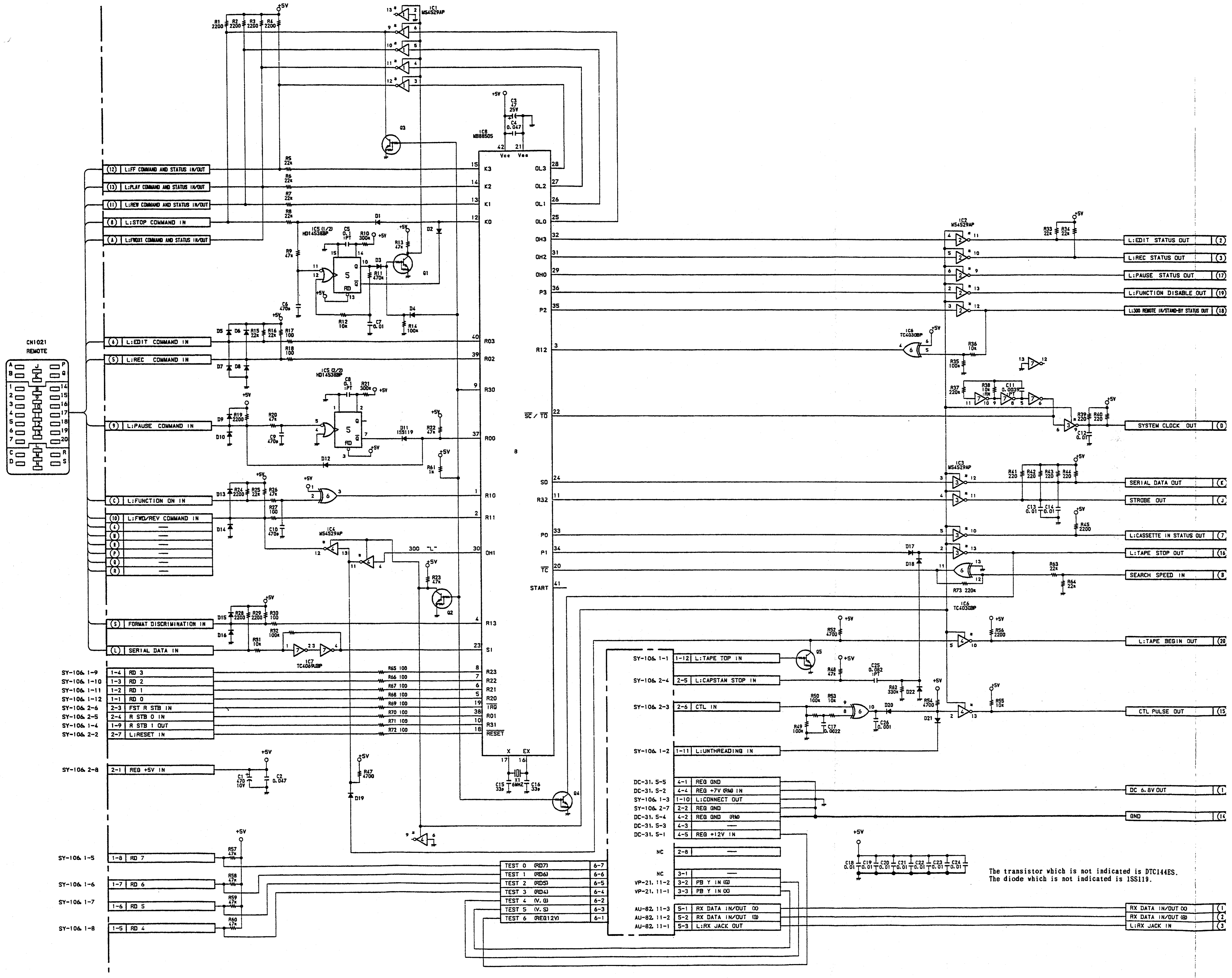

SY-106
SONY
DIP
DEW
CTL AMP
TOPEND DET
STILL TORQUE
FWD TORQUE
REV TORQUE
TAPE SENSOR
TAPE SENVOLT
TENREG VOLT
HOURS METER RESET
REEL SE RVO
PSEL
SLACK KILLER
REG 5V
REMOCON
NORMAL OFF
TEST ON
LOTNO
A
B
C
D
E
F
G
H
J
K
L
M
N
1
2
3
4
5
6

SY-106

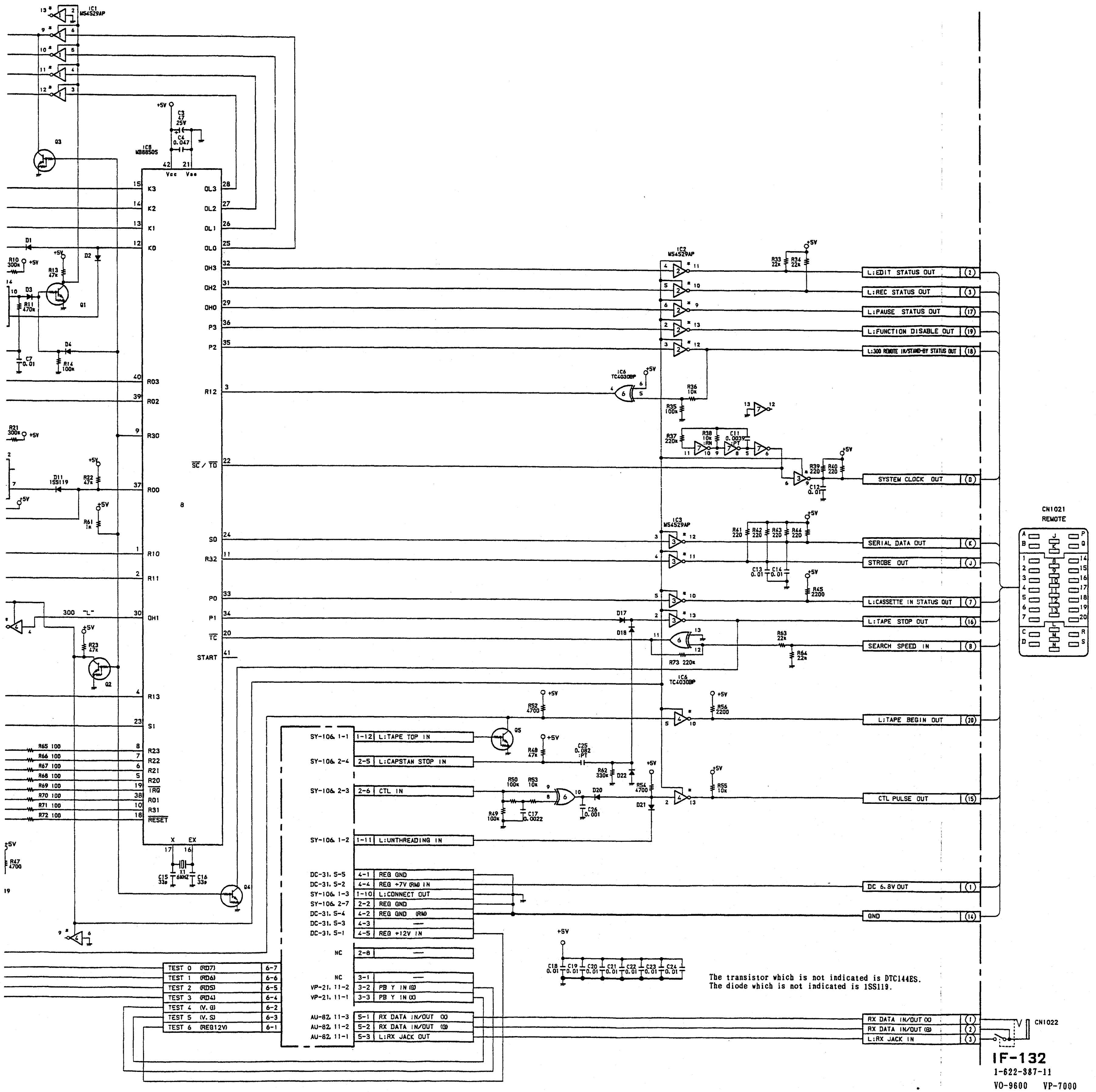
-COMPONENT SIDE-

1-622-389-13
VO-9600
VO-9600P

IF-132:33P INTERFACE
EK;S/N 10001 thru 11100


CN1021
REMOTE
IC1 M54529AP
IC8 MB88505
IC5 (1/2) HD14538BP
IC5 (2/2) HD14538BP
IC4 M54529AP
IC7 TC4069UBP
IC2 M54529AP
IC3 M54529AP
IC6 TC4030BP
L:FF COMMAND AND STATUS IN/OUT
L:PLAY COMMAND AND STATUS IN/OUT
L:REW COMMAND AND STATUS IN/OUT
L:STOP COMMAND IN
L:FWDX1 COMMAND AND STATUS IN/OUT
L:EDIT COMMAND IN
L:REC COMMAND IN
L:PAUSE COMMAND IN
L:FUNCTION ON IN
L:FWD/REV COMMAND IN
FORMAT DISCRIMINATION IN
SERIAL DATA IN
SY-106 1-9 | 1-4 | RD 3
SY-106 1-10 | 1-3 | RD 2
SY-106 1-11 | 1-2 | RD 1
SY-106 1-12 | 1-1 | RD 0
SY-106 2-6 | 2-3 | FST R STB IN
SY-106 2-5 | 2-4 | R STB 0 IN
SY-106 1-4 | 1-9 | R STB 1 OUT
SY-106 2-2 | 2-7 | L:RESET IN
SY-106 2-8 | 2-1 | REG +5V IN
SY-106 1-5 | 1-8 | RD 7
SY-106 1-6 | 1-7 | RD 6
SY-106 1-7 | 1-6 | RD 5
SY-106 1-8 | 1-5 | RD 4
TEST 0 (RD7) 6-7
TEST 1 (RD6) 6-6
TEST 2 (RD5) 6-5
TEST 3 (RD4) 6-4
TEST 4 (V.G) 6-2
TEST 5 (V.S) 6-3
TEST 6 (REG12V) 6-1
SY-106 1-1 | 1-12 | L:TAPE TOP IN
SY-106 2-4 | 2-5 | L:CAPSTAN STOP IN
SY-106 2-3 | 2-6 | CTL IN
SY-106 1-2 | 1-11 | L:UNTHREADING IN
DC-31 5-5 | 4-1 | REG GND
DC-31 5-2 | 4-4 | REG +7V (RN) IN
SY-106 1-3 | 1-10 | L:CONNECT OUT
SY-106 2-7 | 2-2 | REG GND
DC-31 5-4 | 4-2 | REG GND (RN)
DC-31 5-3 | 4-3
DC-31 5-1 | 4-5 | REG +12V IN
NC | 2-8
NC | 3-1
VP-21 11-2 | 3-2 | PB Y IN (G)
VP-21 11-1 | 3-3 | PB Y IN (X)
AU-82 11-3 | 5-1 | RX DATA IN/OUT (X)
AU-82 11-2 | 5-2 | RX DATA IN/OUT (G)
AU-82 11-1 | 5-3 | L:RX JACK OUT
L:EDIT STATUS OUT
L:REC STATUS OUT
L:PAUSE STATUS OUT
L:FUNCTION DISABLE OUT
L:300 REMOTE IN/STAND-BY STATUS OUT
SYSTEM CLOCK OUT
SERIAL DATA OUT
STROBE OUT
L:CASSETTE IN STATUS OUT
L:TAPE STOP OUT
SEARCH SPEED IN
L:TAPE BEGIN OUT
CTL PULSE OUT
DC 6.8V OUT
GND
RX DATA IN/OUT (X)
RX DATA IN/OUT (G)
L:RX JACK IN
K3
K2
K1
K0
OL3
OL2
OL1
OL0
OH3
OH2
OH0
P3
P2
R03
R02
R30
R12
SC / TO
R00
R10
R11
SD
R32
P0
P1
TC
START
OH1
R13
S1
R23
R22
R21
R20
IRQ
R01
R31
RESET
X
EX
Vcc
Vss
X1 6MHZ
+5V
300 "L"
Q1
Q2
Q3
Q4
Q5

The transistor which is not indicated is DTC144ES.
The diode which is not indicated is 1SS119.


IC1 M54529AP
IC8 MB8850S
IC2 M54529AP
IC3 M54529AP
IC6 TC4030BP
K3
K2
K1
K0
OL3
OL2
OL1
OL0
OH3
OH2
OH0
P3
P2
R03
R02
R30
R12
SC / TO
R00
SO
R32
R10
R11
P0
P1
OH1
TC
START
R13
S1
R23
R22
R21
R20
IRQ
R01
R31
RESET
X1 6MHZ
300 "L"
L:EDIT STATUS OUT (2)
L:REC STATUS OUT (3)
L:PAUSE STATUS OUT (17)
L:FUNCTION DISABLE OUT (19)
L:300 REMOTE IN/STAND-BY STATUS OUT (18)
SYSTEM CLOCK OUT (D)
SERIAL DATA OUT (K)
STROBE OUT (J)
L:CASSETTE IN STATUS OUT (7)
L:TAPE STOP OUT (16)
SEARCH SPEED IN (B)
L:TAPE BEGIN OUT (20)
CTL PULSE OUT (15)
DC 6.8V OUT (1)
GND (14)
CN1021
REMOTE
SY-106, 1-1 1-12 L:TAPE TOP IN
SY-106, 2-4 2-5 L:CAPSTAN STOP IN
SY-106, 2-3 2-6 CTL IN
SY-106, 1-2 1-11 L:UNTHREADING IN
DC-31, S-5 4-1 REG GND
DC-31, S-2 4-4 REG +7V (RM) IN
SY-106, 1-3 1-10 L:CONNECT OUT
SY-106, 2-7 2-2 REG GND
DC-31, S-4 4-2 REG GND (RM)
DC-31, S-3 4-3 —
DC-31, S-1 4-5 REG +12V IN
NC 2-8 —
NC 3-1 —
VP-21, 11-2 3-2 PB Y IN (G)
VP-21, 11-1 3-3 PB Y IN (X)
AU-82, 11-3 5-1 RX DATA IN/OUT (X)
AU-82, 11-2 5-2 RX DATA IN/OUT (G)
AU-82, 11-1 5-3 L:RX JACK OUT
TEST 0 (RD7) 6-7
TEST 1 (RD6) 6-6
TEST 2 (RD5) 6-5
TEST 3 (RD4) 6-4
TEST 4 (V. G) 6-2
TEST 5 (V. S) 6-3
TEST 6 (REG12V) 6-1
RX DATA IN/OUT (X) (1)
RX DATA IN/OUT (G) (2)
L:RX JACK IN (3)
CN1022

The transistor which is not indicated is DTC144ES.
The diode which is not indicated is 1SS119.

IF-132

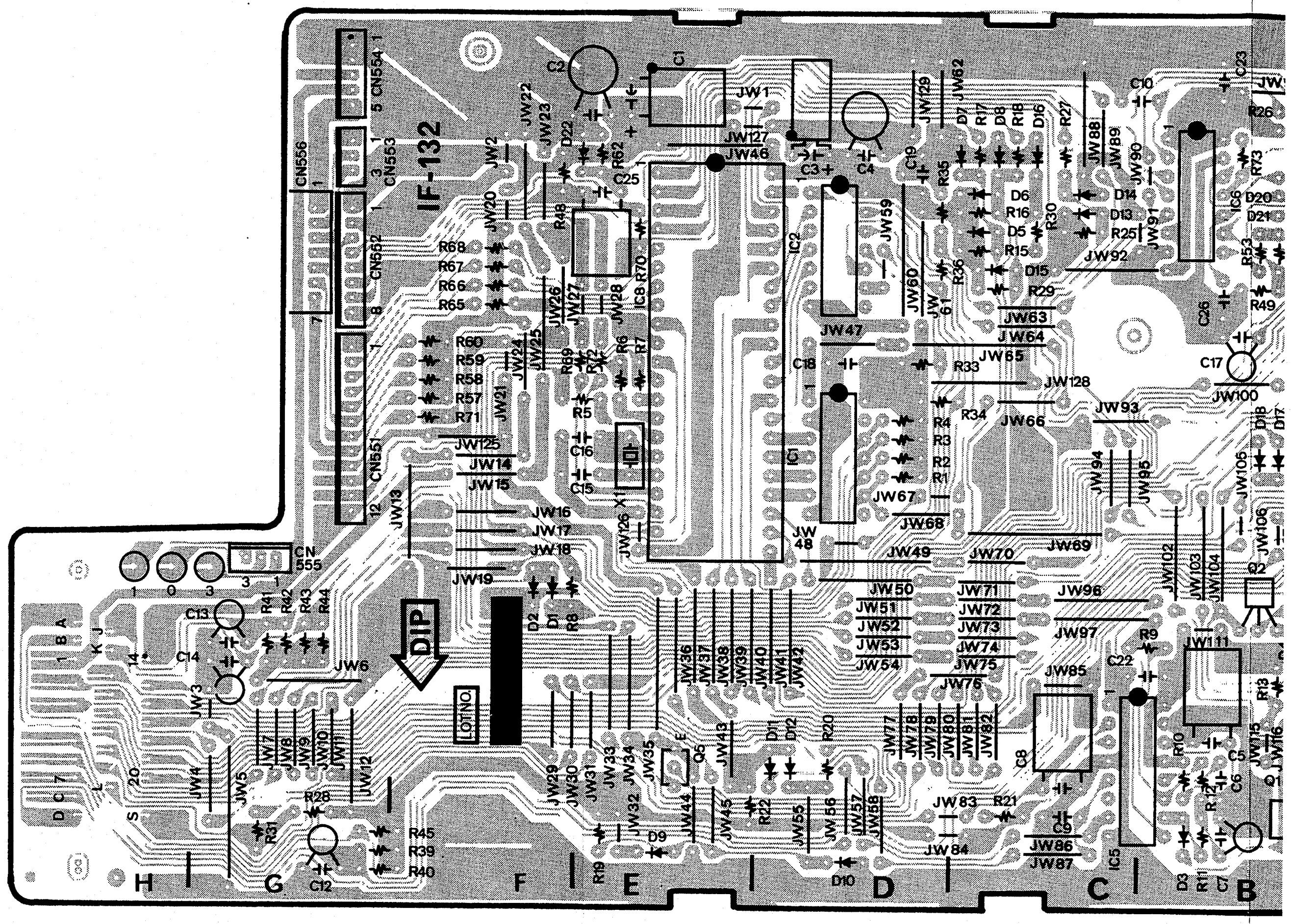
1-622-387-11

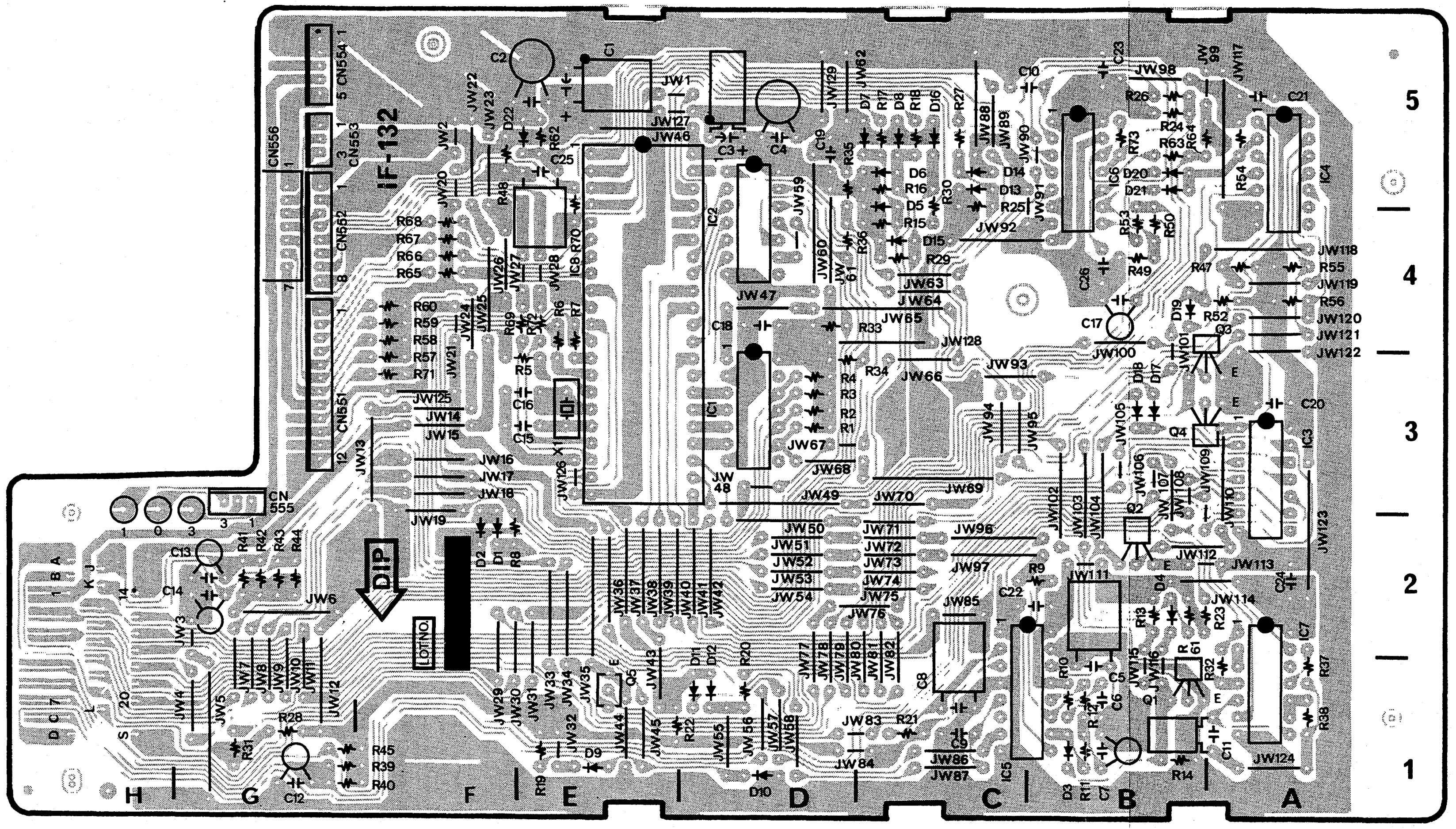
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

IF-132:33P INTERFACE
EK;S/N 10001 thru 11100

IF-132 (1-622-387-11)

CN551	G-3
CN552	G-4
CN553	G-5
CN554	G-5
CN555	G-3
CN556	G-4
D1	F-2
D2	F-2
D3	B-1
D4	B-2
D5	C-5
D6	C-5
D7	C-5
D8	C-5
D9	E-1
D10	D-1
D11	D-1
D12	D-1
D13	C-5
D14	C-5
D15	C-4
D16	C-5
D17	B-3
D18	B-3
D19	B-4
D20	B-5
D21	B-5
D22	E-5
IC1	D-3
IC2	D-4
IC3	A-3
IC4	A-5
IC5	C-2
IC6	B-5
IC7	A-1
IC8	E-4
Q1	B-1
Q2	B-2
Q3	B-4
Q4	B-3
Q5	E-1
X1	E-3


IF-132
CN554
CN556
CN553
CN552
CN551
CN555
IC1
IC2
IC5
IC8
X1
DIP
LOT NO
H
G
F
E
D
C
B


IF-132
DIP
CN551
CN552
CN553
CN554
CN555
CN556
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
X1
Q1
Q2
Q3
Q4
Q5
5
4
3
2
1
H
G
F
E
D
C
B
A

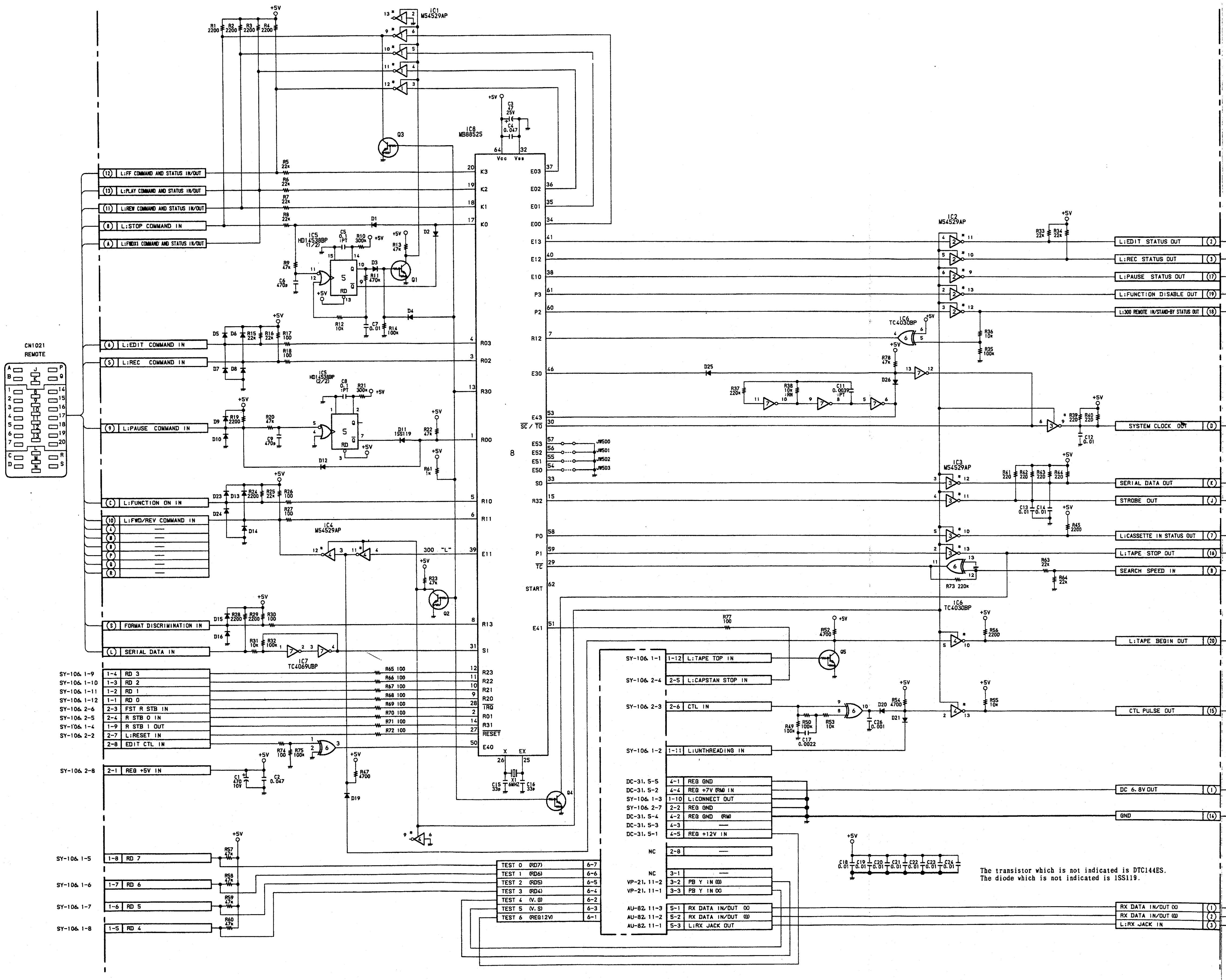
IF-132

-COMPONENT SIDE-

1-622-387-11

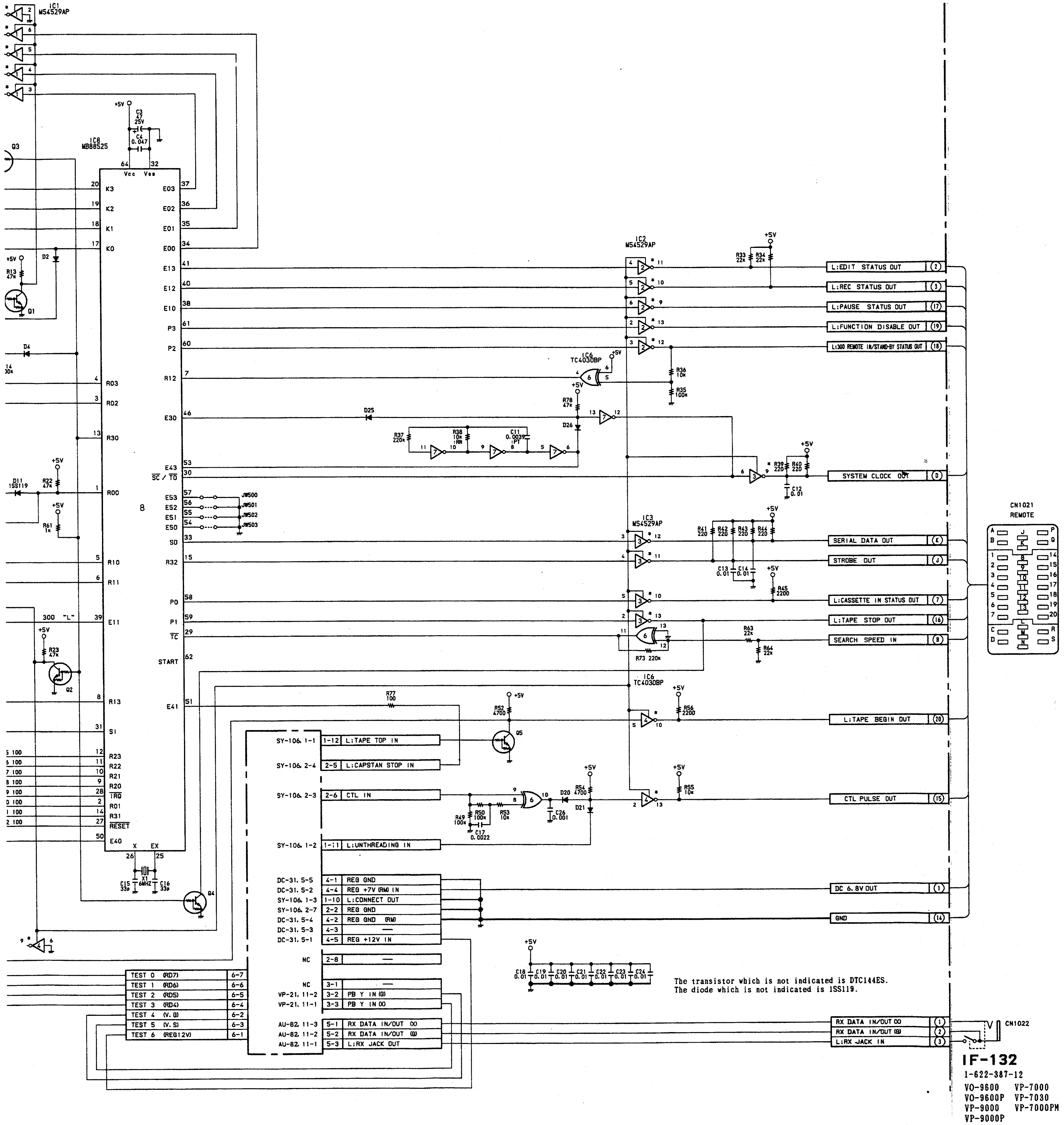
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

IF-132:33P INTERFACE
EK;S/N 11101 and higher


IC1 M54529AP
IC8 MB88525
IC2 M54529AP
IC3 M54529AP
IC4 M54529AP
IC5 HD14538BP (1/2)
IC5 HD14538BP (2/2)
IC6 TC4030BP
IC7 TC4069UBP
CN1021 REMOTE
L:FF COMMAND AND STATUS IN/OUT
L:PLAY COMMAND AND STATUS IN/OUT
L:REW COMMAND AND STATUS IN/OUT
L:STOP COMMAND IN
L:FWDX1 COMMAND AND STATUS IN/OUT
L:EDIT COMMAND IN
L:REC COMMAND IN
L:PAUSE COMMAND IN
L:FUNCTION ON IN
L:FWD/REV COMMAND IN
FORMAT DISCRIMINATION IN
SERIAL DATA IN
L:EDIT STATUS OUT
L:REC STATUS OUT
L:PAUSE STATUS OUT
L:FUNCTION DISABLE OUT
L:300 REMOTE IN/STAND-BY STATUS OUT
SYSTEM CLOCK OUT
SERIAL DATA OUT
STROBE OUT
L:CASSETTE IN STATUS OUT
L:TAPE STOP OUT
SEARCH SPEED IN
L:TAPE BEGIN OUT
CTL PULSE OUT
DC 6.8V OUT
GND
RX DATA IN/OUT (+)
RX DATA IN/OUT (-)
L:RX JACK IN
SY-106 1-1 L:TAPE TOP IN
SY-106 2-4 L:CAPSTAN STOP IN
SY-106 2-3 CTL IN
SY-106 1-2 L:UNTHREADING IN
REG GND
REG +7V IN
L:CONNECT OUT
REG +12V IN
PB Y IN
RX DATA IN/OUT
L:RX JACK OUT
RD 3
RD 2
RD 1
RD 0
FST R STB IN
R STB 0 IN
R STB 1 OUT
L:RESET IN
EDIT CTL IN
REG +5V IN
RD 7
RD 6
RD 5
RD 4
TEST 0 (RD7)
TEST 1 (RD6)
TEST 2 (RD5)
TEST 3 (RD4)
TEST 4 (V.G)
TEST 5 (V.S)
TEST 6 (REG12V)
+5V

The transistor which is not indicated is DTC144ES.
The diode which is not indicated is 1SS119.

IF-
1-622
VO-96
VO-96
VP-90
VP-90


IC1 M54529AP
IC8 MB88525
IC2 M54529AP
IC3 M54529AP
IC6 TC4030BP
CN1021 REMOTE
CN1022
L:EDIT STATUS OUT
L:REC STATUS OUT
L:PAUSE STATUS OUT
L:FUNCTION DISABLE OUT
L:300 REMOTE IN/STAND-BY STATUS OUT
SYSTEM CLOCK OUT
SERIAL DATA OUT
STROBE OUT
L:CASSETTE IN STATUS OUT
L:TAPE STOP OUT
SEARCH SPEED IN
L:TAPE BEGIN OUT
CTL PULSE OUT
DC 6.8V OUT
GND
RX DATA IN/OUT (X)
RX DATA IN/OUT (G)
L:RX JACK IN
L:TAPE TOP IN
L:CAPSTAN STOP IN
CTL IN
L:UNTHREADING IN
REG GND
REG +7V (M) IN
L:CONNECT OUT
REG +12V IN
PB Y IN (G)
PB Y IN (X)
TEST 0 (RD7)
TEST 1 (RD6)
TEST 2 (RD5)
TEST 3 (RD4)
TEST 4 (V.G)
TEST 5 (V.S)
TEST 6 (REG12V)

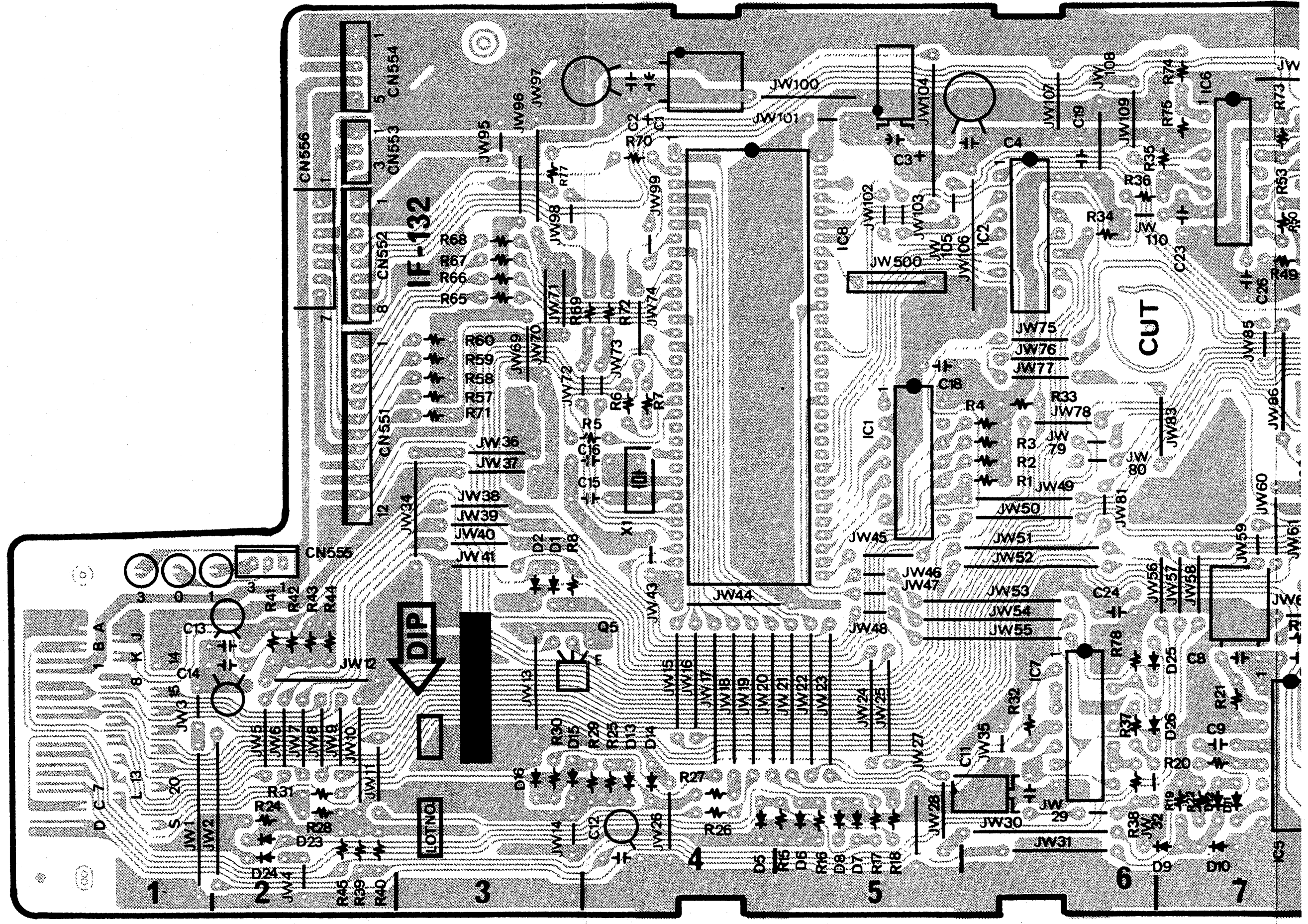
The transistor which is not indicated is DTC144ES.
The diode which is not indicated is 1SS119.

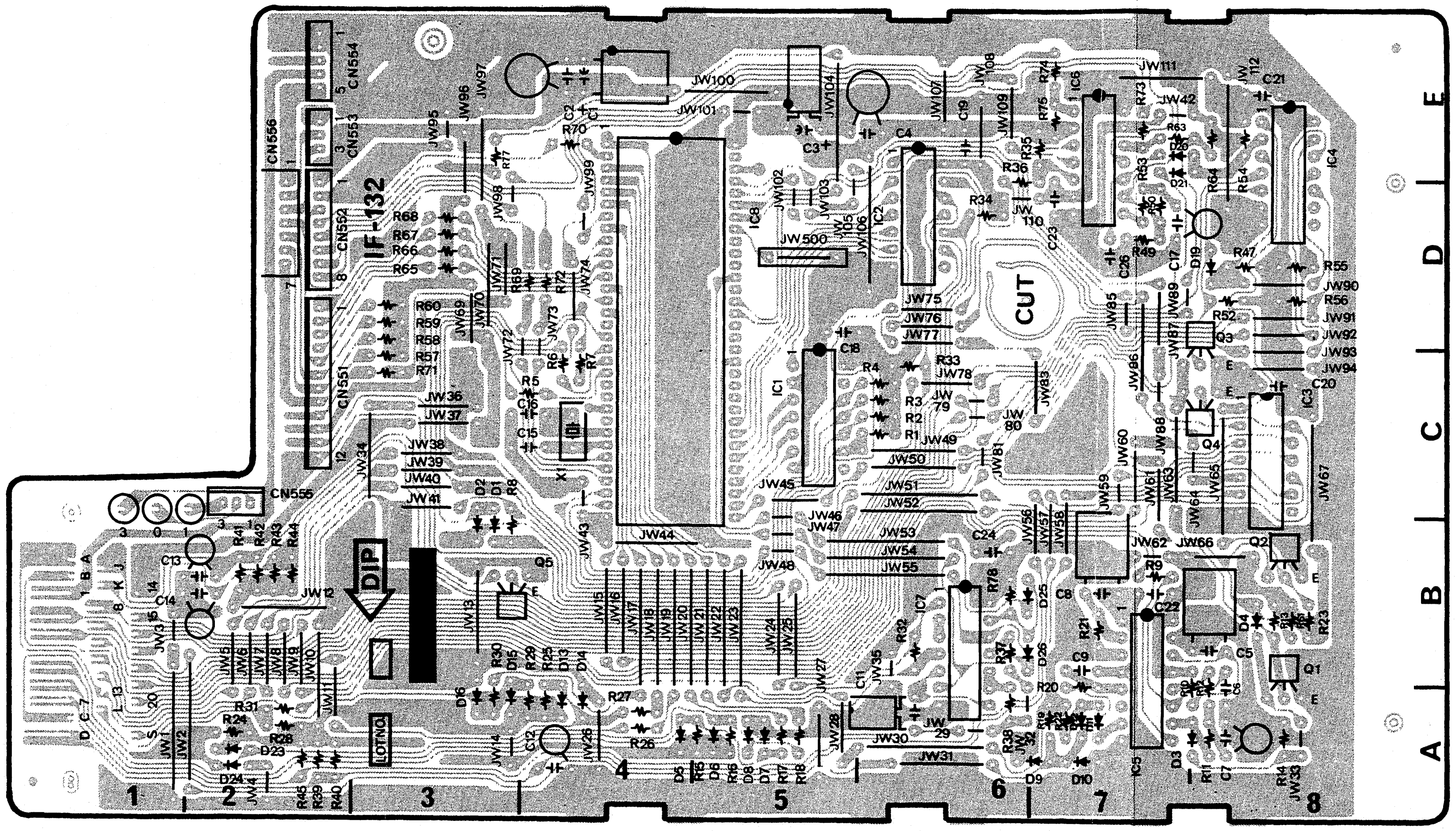
IF-132
1-622-387-12
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

IF-132:33P INTERFACE
EK;S/N 11101 and higher

IF-132 (1-622-387-12)

CN551	C-2
CN552	D-2
CN553	E-2
CN554	E-2
CN555	C-2
CN556	D-2
D1	B-3
D2	B-3
D3	A-8
D4	B-8
D5	A-4
D6	A-5
D7	A-5
D8	A-5
D9	A-7
D10	A-7
D13	A-4
D14	A-4
D15	A-3
D16	A-3
D19	D-8
D20	E-7
D21	E-7
D23	A-2
D24	A-2
D25	B-7
D26	B-7
IC1	C-5
IC2	D-6
IC3	C-8
IC4	E-8
IC5	B-7
IC6	E-7
IC7	B-6
IC8	D-4
Q1	B-8
Q2	B-8
Q3	D-8
Q4	C-8
Q5	B-3
X1	C-4


IF-132
DIP
CUT
CN551
CN552
CN553
CN554
CN555
CN556
IC1
IC2
IC6
IC8
X1
Q5
1
2
3
4
5
6
7


IF-132
CN554
CN553
CN556
CN552
CN551
CN555
DIP
CUT
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
Q1
Q2
Q3
Q4
Q5
JW500
1
2
3
4
5
6
7
8
A
B
C
D
E

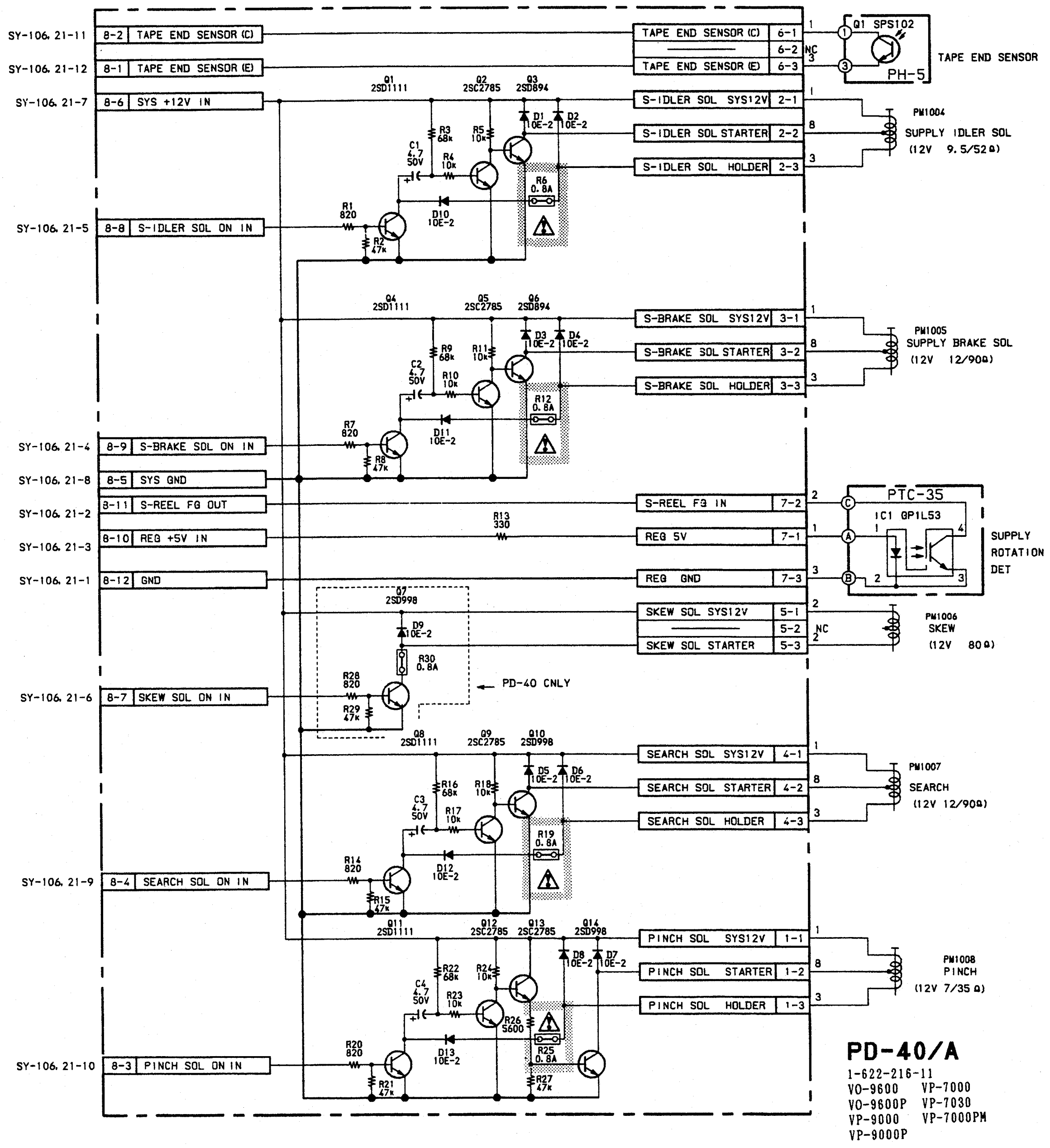
IF-132

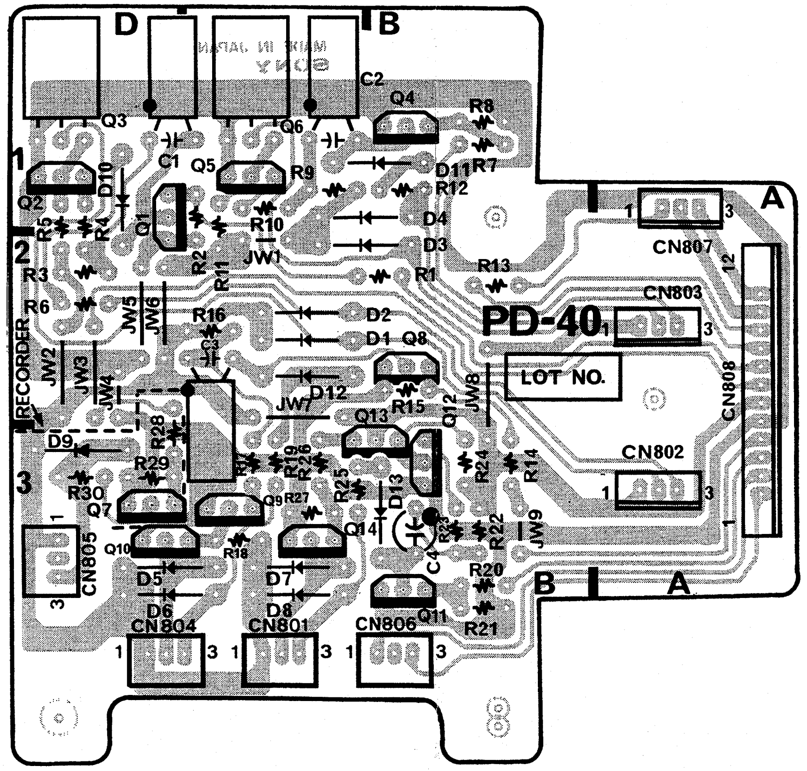
-COMPONENT SIDE-

1-622-387-12

VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

PD-40:PLUNGER SOLENOIDS


SY-106. 21-11
8-2 TAPE END SENSOR (C)
SY-106. 21-12
8-1 TAPE END SENSOR (E)
SY-106. 21-7
8-6 SYS +12V IN
SY-106. 21-5
8-8 S-IDLER SOL ON IN
SY-106. 21-4
8-9 S-BRAKE SOL ON IN
SY-106. 21-8
8-5 SYS GND
SY-106. 21-2
8-11 S-REEL FG OUT
SY-106. 21-3
8-10 REG +5V IN
SY-106. 21-1
8-12 GND
SY-106. 21-6
8-7 SKEW SOL ON IN
SY-106. 21-9
8-4 SEARCH SOL ON IN
SY-106. 21-10
8-3 PINCH SOL ON IN
Q1 2SD1111
Q2 2SC2785
Q3 2SD894
D1 10E-2
D2 10E-2
R3 68k
R5 10k
C1 4.7 50V
R4 10k
R6 0.8A
R1 820
R2 47k
D10 10E-2
Q4 2SD1111
Q5 2SC2785
Q6 2SD894
D3 10E-2
D4 10E-2
R9 68k
R11 10k
C2 4.7 50V
R10 10k
R12 0.8A
R7 820
R8 47k
D11 10E-2
R13 330
Q7 2SD998
D9 10E-2
R30 0.8A
R28 820
R29 47k
PD-40 CNLY
Q8 2SD1111
Q9 2SC2785
Q10 2SD998
D5 10E-2
D6 10E-2
R16 68k
R18 10k
C3 4.7 50V
R17 10k
R19 0.8A
R14 820
R15 47k
D12 10E-2
Q11 2SD1111
Q12 2SC2785
Q13 2SC2785
Q14 2SD998
D8 10E-2
D7 10E-2
R22 68k
R24 10k
C4 4.7 50V
R23 10k
R26 5600
R25 0.8A
R20 820
R21 47k
D13 10E-2
R27 47k
TAPE END SENSOR (C) 6-1
6-2
TAPE END SENSOR (E) 6-3
S-IDLER SOL SYS12V 2-1
S-IDLER SOL STARTER 2-2
S-IDLER SOL HOLDER 2-3
S-BRAKE SOL SYS12V 3-1
S-BRAKE SOL STARTER 3-2
S-BRAKE SOL HOLDER 3-3
S-REEL FG IN 7-2
REG 5V 7-1
REG GND 7-3
SKEW SOL SYS12V 5-1
5-2
SKEW SOL STARTER 5-3
SEARCH SOL SYS12V 4-1
SEARCH SOL STARTER 4-2
SEARCH SOL HOLDER 4-3
PINCH SOL SYS12V 1-1
PINCH SOL STARTER 1-2
PINCH SOL HOLDER 1-3
NC
Q1 SPS102
PH-5
TAPE END SENSOR
PM1004
SUPPLY IDLER SOL
(12V 9.5/52Ω)
PM1005
SUPPLY BRAKE SOL
(12V 12/90Ω)
PTC-35
IC1 GP1L53
SUPPLY
ROTATION
DET
PM1006
SKEW
(12V 80Ω)
PM1007
SEARCH
(12V 12/90Ω)
PM1008
PINCH
(12V 7/35 Ω)
PD-40/A
1-622-216-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


D
B
A
MADE IN JAPAN
SONY
Q3
C1
Q6
C2
Q4
R8
R7
D11
R12
Q2
Q5
R9
D10
Q1
R5
R4
R10
D4
D3
JW1
R2
R11
R1
R13
R3
R6
JW5
JW6
R16
C3
D2
D1
Q8
PD-40
CN807
CN803
CN808
LOT NO.
RECORDER
JW2
JW3
JW4
D12
JW7
R15
Q13
Q12
JW8
D9
R28
R29
R30
R19
R26
R25
R24
R14
CN802
Q7
Q9
R27
D13
Q14
C4
R23
R22
JW9
Q10
R18
CN805
D5
D6
D7
D8
R20
R21
Q11
CN804
CN801
CN806
1
2
3
12

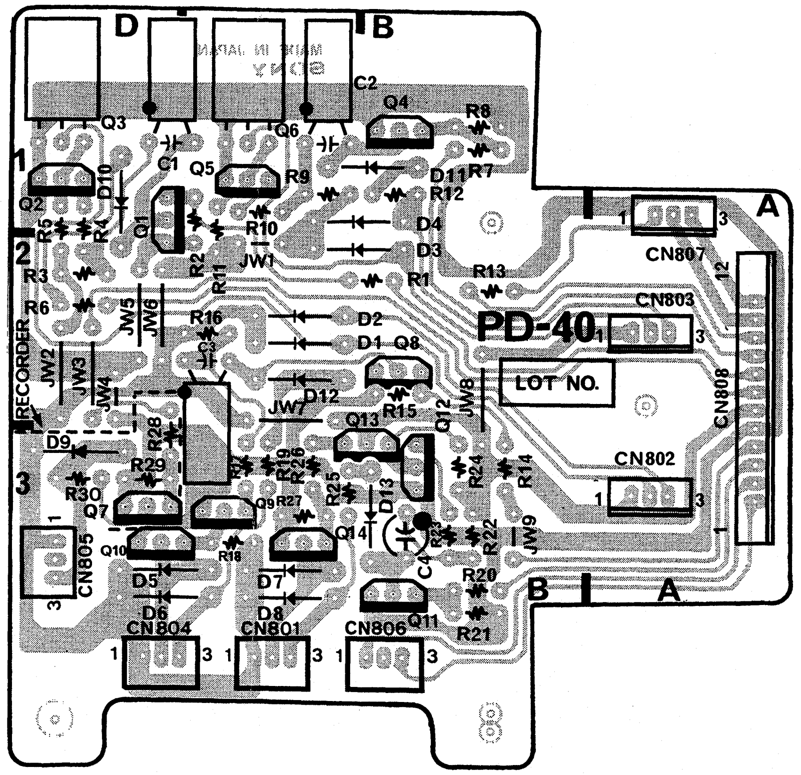
PD-40

-COMPONENT SIDE-

1-622-216-11
VO-9600
VO-9600P

NOTE;

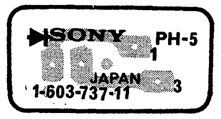
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.


D
B
C2
Q3
Q4
R8
C1
Q6
Q5
R9
D11
R7
R12
1
Q2
D10
Q1
R10
D4
A
1
3
R5
R4
R2
JW1
D3
CN807
2
R3
R11
R13
R1
12
R6
JW5
JW6
R16
D2
CN803
PD-40
1
3
C3
D1
Q8
RECORDER
JW2
JW3
JW4
LOT NO.
CN808
D12
JW8
JW7
R15
Q12
R28
Q13
D9
R29
R17
R19
R26
R24
R14
CN802
3
R30
R25
D13
Q7
Q9
R27
1
3
1
Q10
R18
Q14
R23
R22
JW9
1
CN805
C4
R20
3
D5
D7
B
A
D6
D8
Q11
CN804
CN801
CN806
R21
1
3
1
3
1
3

PD-40

-COMPONENT SIDE-

1-622-216-11
VO-9600
VO-9600P

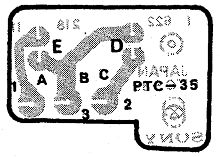

SONY
PH-5
1
JAPAN
3
1-603-737-11

PH-5

-COMPONENT SIDE-

1-603-737-11

VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


1 622
218
E
D
A
B
C
JAPAN
PTC-35
2
3
1

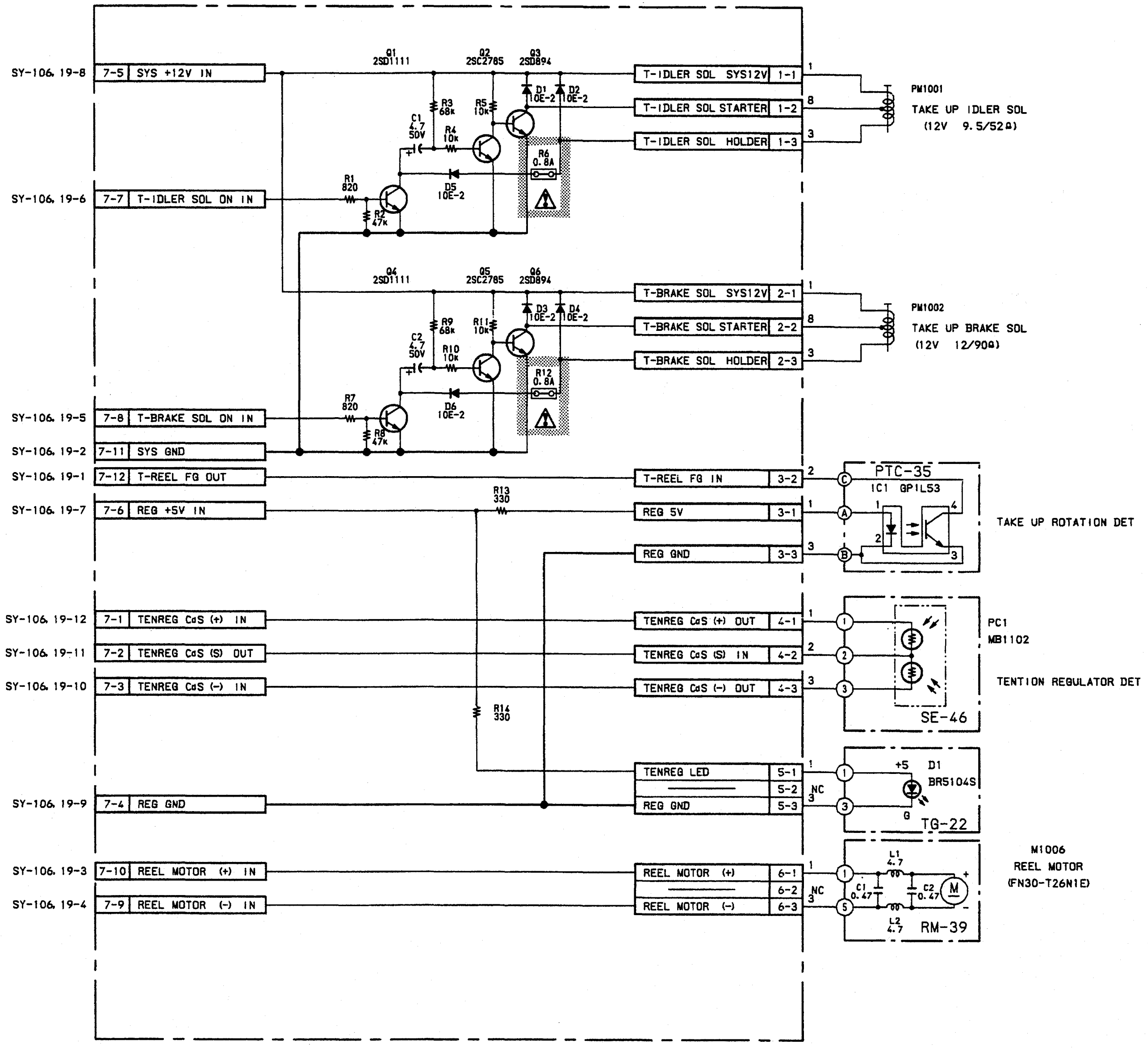
PTC-35

-COMPONENT SIDE-

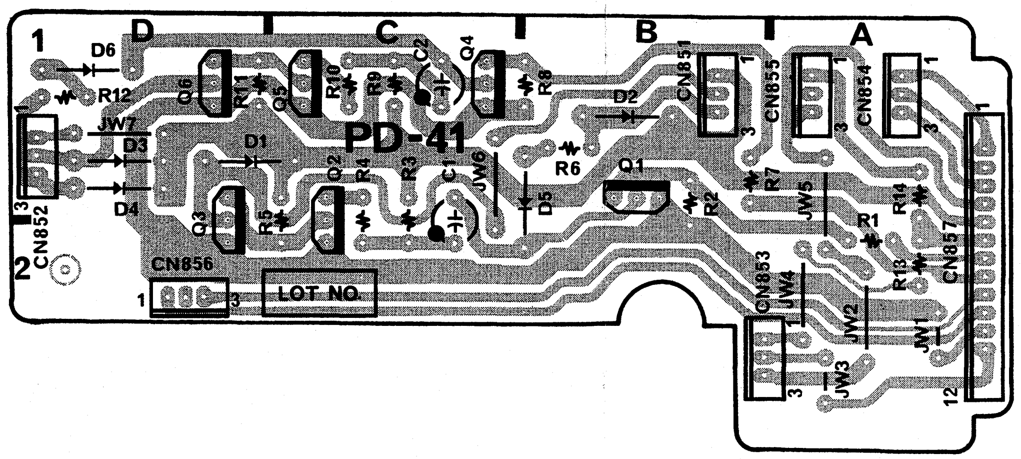
1-622-218-11

VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

PD-41:PLUNGER SOLENOIDS


SY-106, 19-8
7-5 SYS +12V IN
SY-106, 19-6
7-7 T-IDLER SOL ON IN
SY-106, 19-5
7-8 T-BRAKE SOL ON IN
SY-106, 19-2
7-11 SYS GND
SY-106, 19-1
7-12 T-REEL FG OUT
SY-106, 19-7
7-6 REG +5V IN
SY-106, 19-12
7-1 TENREG CdS (+) IN
SY-106, 19-11
7-2 TENREG CdS (S) OUT
SY-106, 19-10
7-3 TENREG CdS (-) IN
SY-106, 19-9
7-4 REG GND
SY-106, 19-3
7-10 REEL MOTOR (+) IN
SY-106, 19-4
7-9 REEL MOTOR (-) IN
Q1 2SD1111
Q2 2SC2785
Q3 2SD894
Q4 2SD1111
Q5 2SC2785
Q6 2SD894
C1 4.7 50V
C2 4.7 50V
R1 820
R2 47k
R3 68k
R4 10k
R5 10k
R6 0.8A
R7 820
R8 47k
R9 68k
R10 10k
R11 10k
R12 0.8A
R13 330
R14 330
D1 10E-2
D2 10E-2
D3 10E-2
D4 10E-2
D5 10E-2
D6 10E-2
T-IDLER SOL SYS12V 1-1
T-IDLER SOL STARTER 1-2
T-IDLER SOL HOLDER 1-3
PM1001
TAKE UP IDLER SOL
(12V 9.5/52Ω)
T-BRAKE SOL SYS12V 2-1
T-BRAKE SOL STARTER 2-2
T-BRAKE SOL HOLDER 2-3
PM1002
TAKE UP BRAKE SOL
(12V 12/90Ω)
T-REEL FG IN 3-2
REG 5V 3-1
REG GND 3-3
PTC-35
IC1 GP1L53
TAKE UP ROTATION DET
TENREG CdS (+) OUT 4-1
TENREG CdS (S) IN 4-2
TENREG CdS (-) OUT 4-3
PC1
MB1102
TENTION REGULATOR DET
SE-46
TENREG LED 5-1
5-2
REG GND 5-3
NC
+5 D1
BR5104S
G
TG-22
REEL MOTOR (+) 6-1
6-2
REEL MOTOR (-) 6-3
M1006
REEL MOTOR
(FN30-T26N1E)
L1 4.7
L2 4.7
C1 0.47
C2 0.47
M
RM-39

PD-41
1-622-217-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

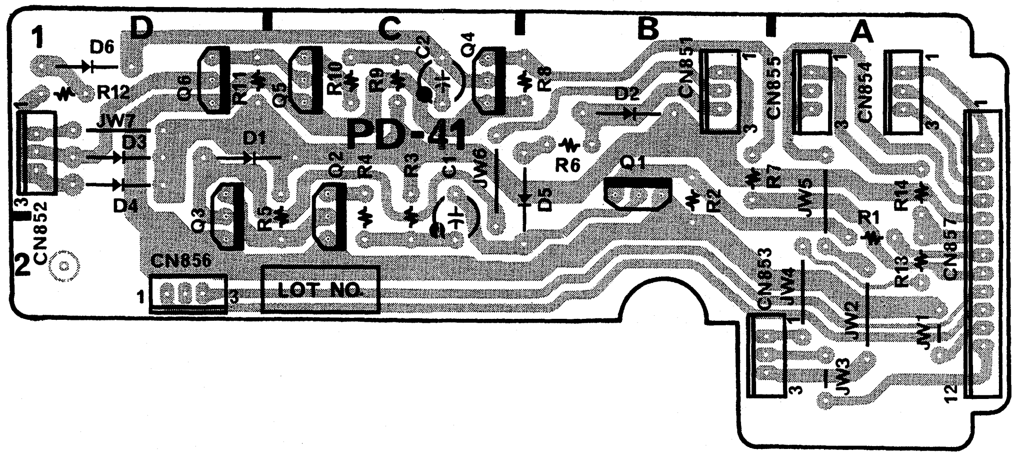

1
2
D
C
B
A
D6
R12
JW7
D3
D4
CN852
CN856
LOT NO.
Q6
R11
Q5
R10
R9
C2
Q4
R8
D1
PD-41
Q3
R5
Q2
R4
R3
C1
JW6
D5
D2
R6
Q1
R2
R7
CN851
CN855
CN854
JW5
R1
R14
R13
CN853
JW4
JW2
JW3
JW1
CN857
12

PD-41
-COMPONENT SIDE-
1-622-217-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

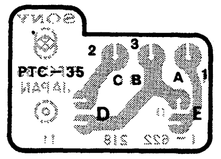
PTC-35:S/T REEL ROTATION DETECTOR
RM-39:REEL MOTOR
SE-46:TENSION REGULATOR DETECTOR
TG-22:TENSION REGULATOR LED


1
2
D
C
B
A
D6
R12
JW7
D3
D4
D1
Q6
R11
Q5
R10
R9
C2
Q4
R8
D2
CN851
CN855
CN854
PD-41
Q2
R4
R3
C1
JW6
D5
R6
Q1
R7
R2
JW5
R1
R14
Q3
R5
CN852
CN856
LOT NO.
CN853
JW4
JW2
JW3
JW1
R13
CN857
3
12

PD-41

-COMPONENT SIDE-

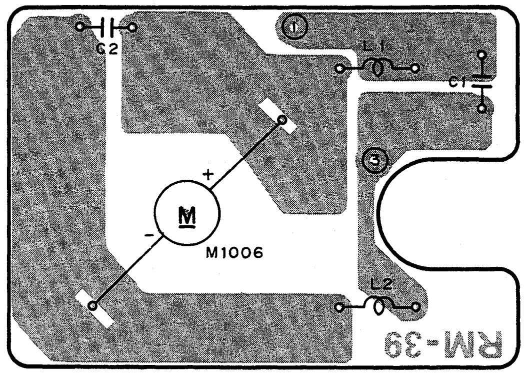
1-622-217-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


PTC-35
2
3
1
C B
A
D
E

PTC-35

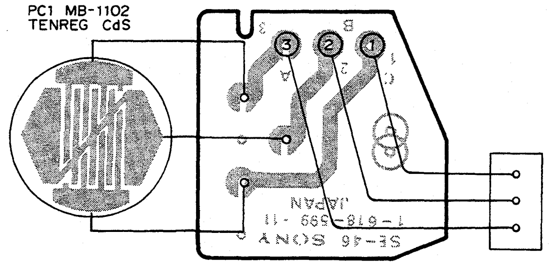
-COMPONENT SIDE-

1-622-218-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


C2
①
L1
C1
③
+
M
-
M1006
L2

RM-39 -SOLDERING SIDE-

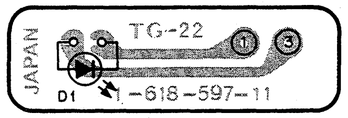
1-618-873-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


PC1 MB-1102
TENREG CdS
③
②
①

SE-46

-SOLDERING SIDE-

1-618-599-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

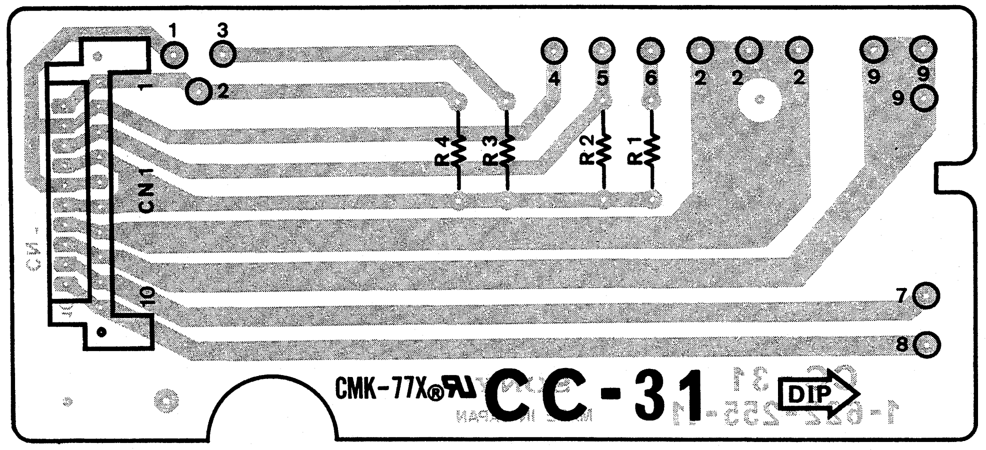

JAPAN
TG-22
①
③
D1
1-618-597-11

TG-22

-SOLDERING SIDE-

1-618-597-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

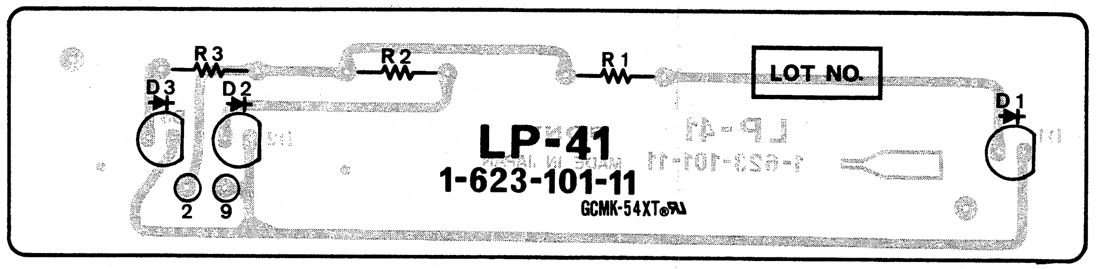
CC-31:CASSETTE COMPARTMENT DRIVER
CC-32:CASSETTE IN DETECTOR
CC-33:CASSETTE DOWN DETECTOR
LP-41 :CASSETTE COMPARTMENT LIGHT


1
3
2
4
5
6
2
2
2
9
9
9
R4
R3
R2
R1
CN1
1
10
7
8
CMK-77X
CC-31
DIP

CC-31

-COMPONENT SIDE-

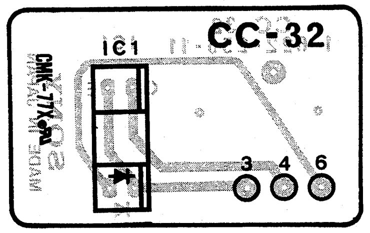
1-622-255-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


R3
R2
R1
LOT NO.
D3
D2
D1
LP-41
1-623-101-11
GCMK-54XT
2
9

LP-41

-COMPONENT SIDE-

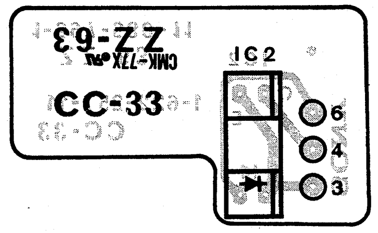
1-623-101-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


IC1
CC-32
CMK-77X
3
4
6

CC-32

-COMPONENT SIDE-

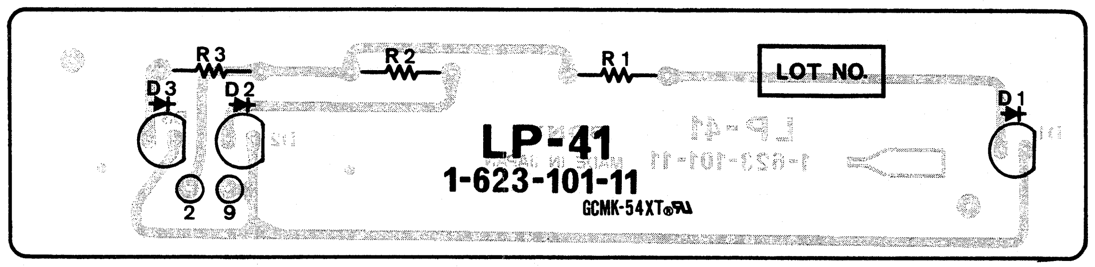
1-622-256-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


CMK-77X
IC2
CC-33
6
4
3

CC-33

-COMPONENT SIDE-

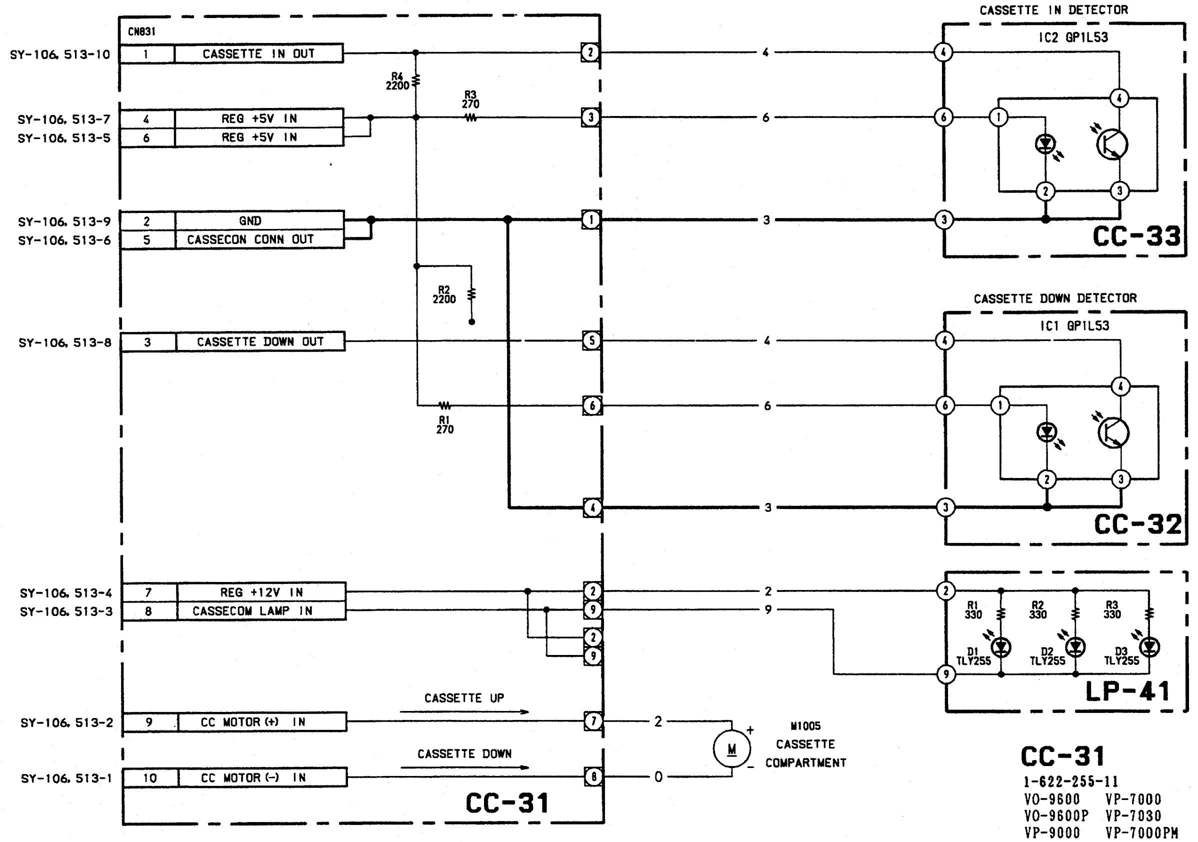
1-622-257-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


R3
R2
R1
LOT NO.
D3
D2
D1
LP-41
1-623-101-11
GCMK-54XT
2
9

LP-41

-COMPONENT SIDE-

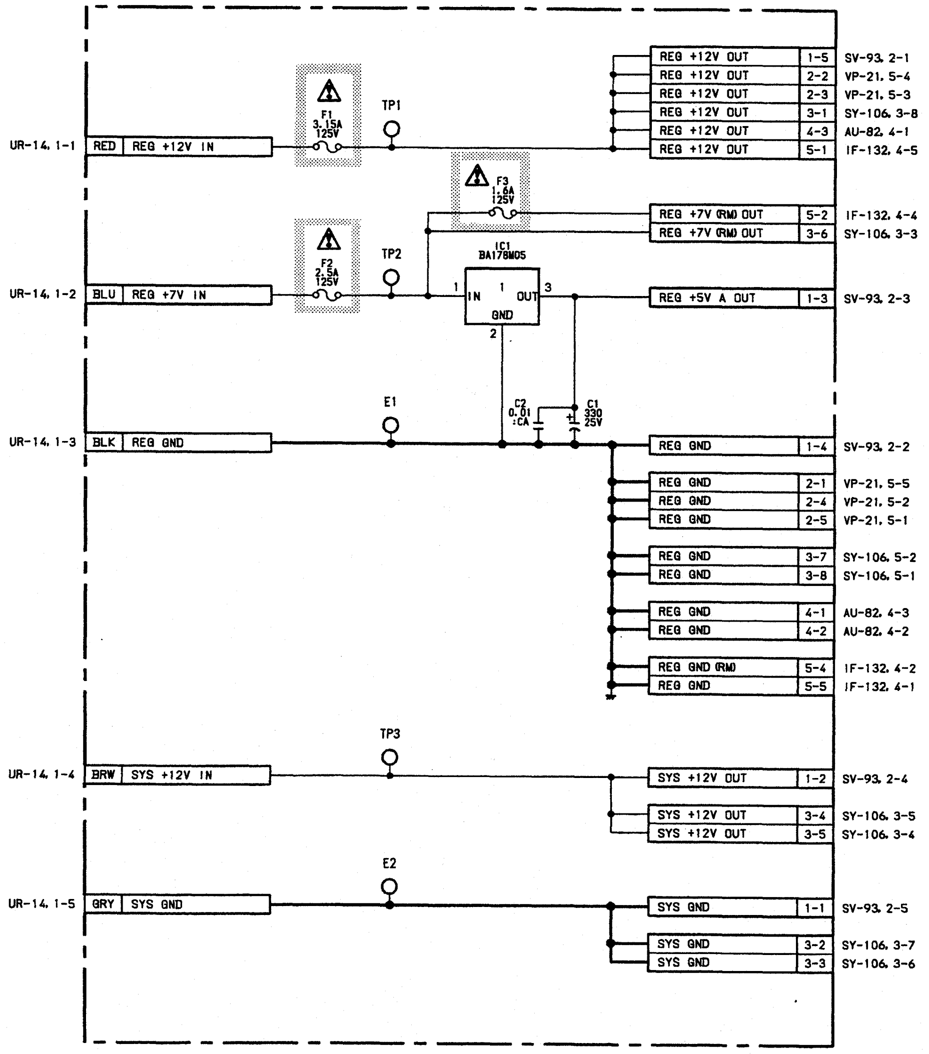
1-623-101-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


CN831
SY-106, 513-10
1 CASSETTE IN OUT
SY-106, 513-7
4 REG +5V IN
SY-106, 513-5
6 REG +5V IN
SY-106, 513-9
2 GND
SY-106, 513-6
5 CASSECON CONN OUT
SY-106, 513-8
3 CASSETTE DOWN OUT
SY-106, 513-4
7 REG +12V IN
SY-106, 513-3
8 CASSECOM LAMP IN
SY-106, 513-2
9 CC MOTOR (+) IN
SY-106, 513-1
10 CC MOTOR (–) IN
R4 2200
R3 270
R2 2200
R1 270
CASSETTE UP
CASSETTE DOWN
CC-31
M1005
CASSETTE
COMPARTMENT
M
CASSETTE IN DETECTOR
IC2 GP1L53
CC-33
CASSETTE DOWN DETECTOR
IC1 GP1L53
CC-32
R1 330
R2 330
R3 330
D1 TLY255
D2 TLY255
D3 TLY255
LP-41

CC-31

1-622-255-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

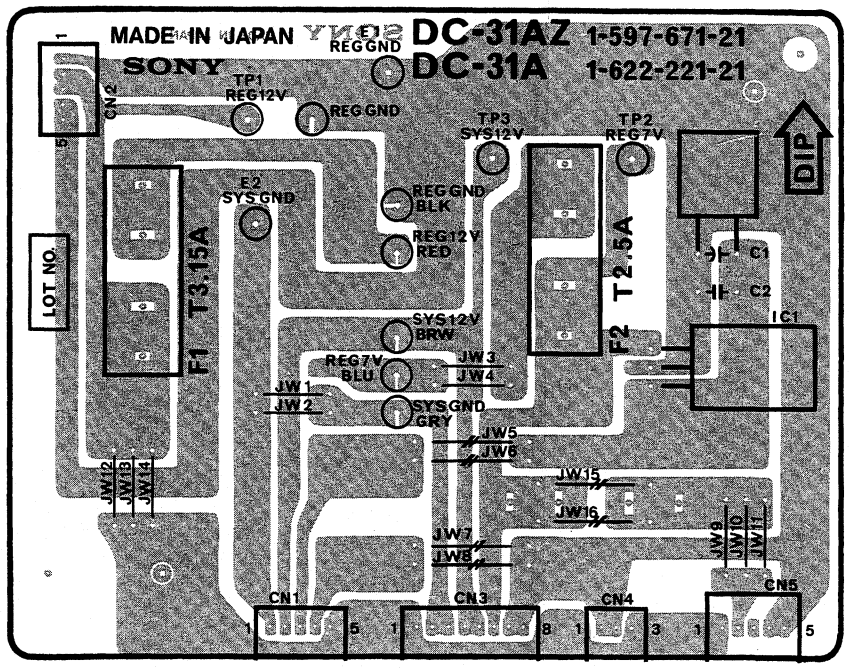
DC-31A :DC SUPPLY


UR-14, 1-1
RED
REG +12V IN
F1
3.15A
125V
TP1
REG +12V OUT 1-5 SV-93, 2-1
REG +12V OUT 2-2 VP-21, 5-4
REG +12V OUT 2-3 VP-21, 5-3
REG +12V OUT 3-1 SY-106, 3-8
REG +12V OUT 4-3 AU-82, 4-1
REG +12V OUT 5-1 IF-132, 4-5
F3
1.6A
125V
REG +7V (RM) OUT 5-2 IF-132, 4-4
REG +7V (RM) OUT 3-6 SY-106, 3-3
UR-14, 1-2
BLU
REG +7V IN
F2
2.5A
125V
TP2
IC1
BA178M05
1
IN
OUT
3
GND
2
REG +5V A OUT 1-3 SV-93, 2-3
E1
C2
0.01
:CA
C1
330
25V
UR-14, 1-3
BLK
REG GND
REG GND 1-4 SV-93, 2-2
REG GND 2-1 VP-21, 5-5
REG GND 2-4 VP-21, 5-2
REG GND 2-5 VP-21, 5-1
REG GND 3-7 SY-106, 5-2
REG GND 3-8 SY-106, 5-1
REG GND 4-1 AU-82, 4-3
REG GND 4-2 AU-82, 4-2
REG GND (RM) 5-4 IF-132, 4-2
REG GND 5-5 IF-132, 4-1
TP3
UR-14, 1-4
BRW
SYS +12V IN
SYS +12V OUT 1-2 SV-93, 2-4
SYS +12V OUT 3-4 SY-106, 3-5
SYS +12V OUT 3-5 SY-106, 3-4
E2
UR-14, 1-5
GRY
SYS GND
SYS GND 1-1 SV-93, 2-5
SYS GND 3-2 SY-106, 3-7
SYS GND 3-3 SY-106, 3-6

*NOTE
VO-9600P, VP-9000P
F3 is deleted.

DC-31/A

1-622-221-11/-21
VO-9600
VO-9600P
VP-9000
VP-9000P


MADE IN JAPAN
SONY
E1
REG GND
DC-31AZ 1-597-671-21
DC-31A 1-622-221-21
CN2
1
5
TP1
REG12V
REG GND
TP3
SYS12V
TP2
REG7V
DIP
E2
SYS GND
REG GND
BLK
REG12V
RED
LOT NO.
F1 T3.15A
F2 T2.5A
C1
C2
IC1
SYS12V
BRW
REG7V
BLU
SYS GND
GRY
JW1
JW2
JW3
JW4
JW5
JW6
JW7
JW8
JW9
JW10
JW11
JW12
JW13
JW14
JW15
JW16
CN1
CN3
CN4
CN5
1
5
1
8
1
3
1
5

DC-31A

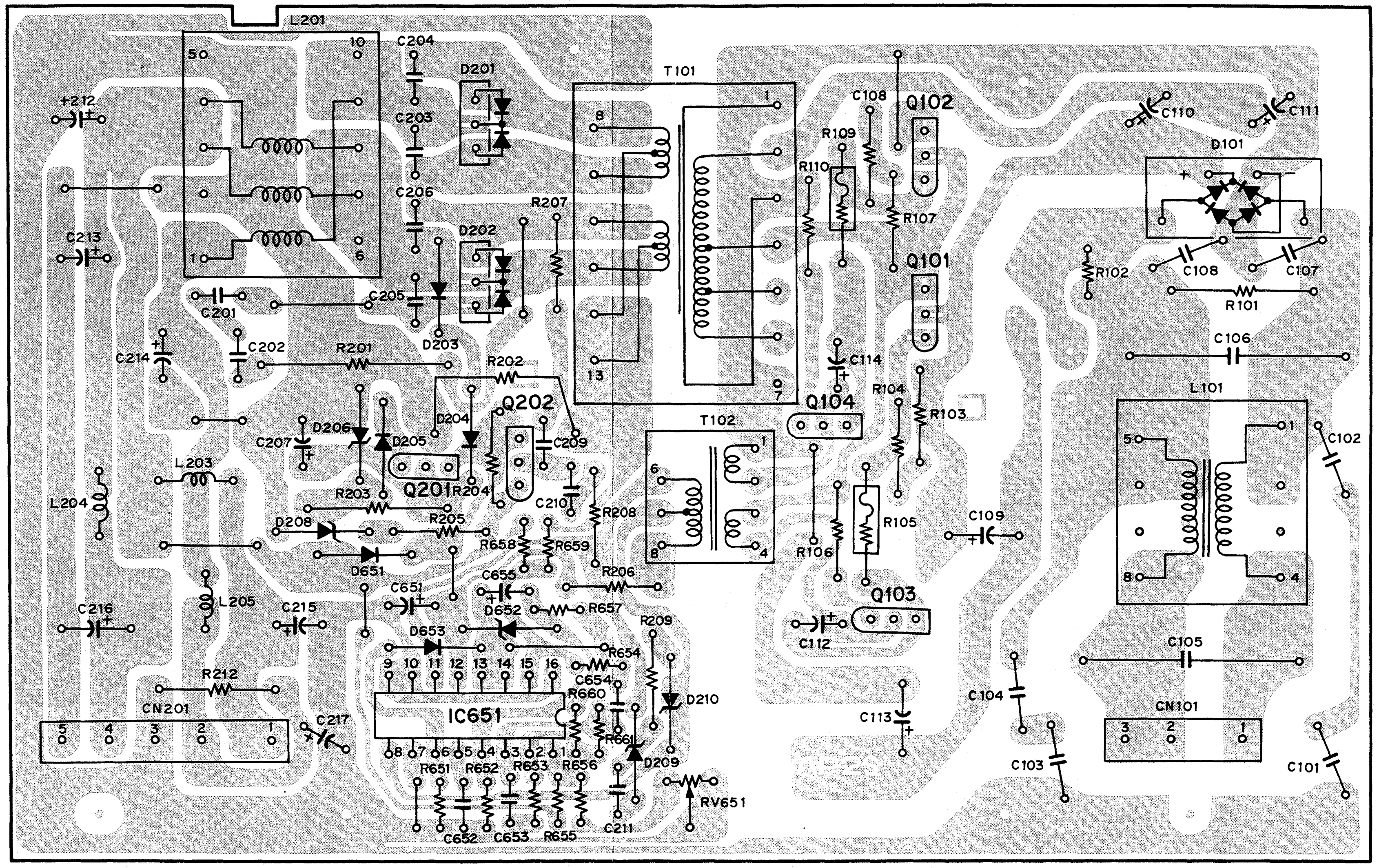
-COMPONENT SIDE-

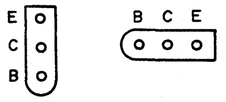
1-622-221-21
VO-9600P
VP-9000P

NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

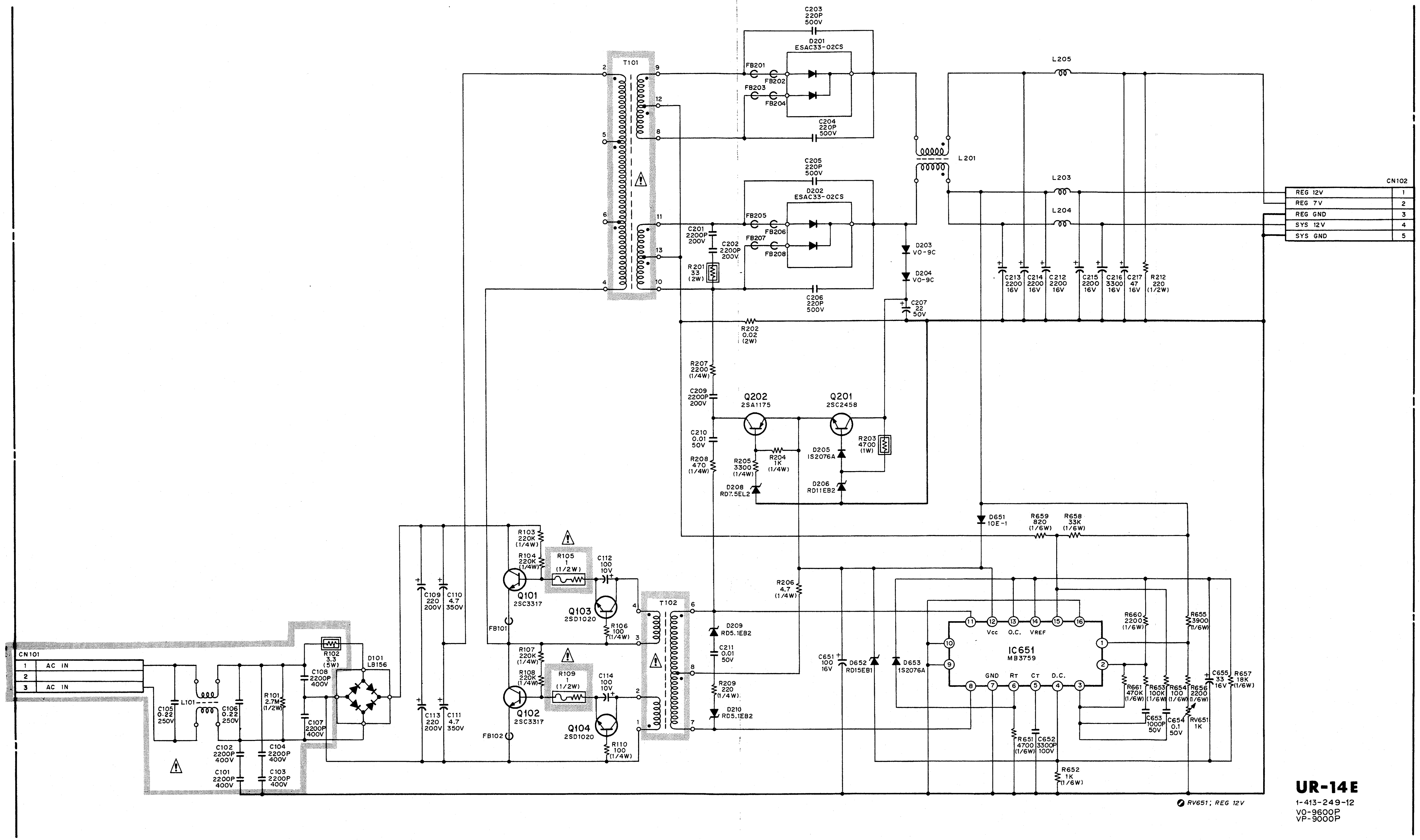
UR-14E:SWITCHING REGULATOR


L201
5
10
1
6
C204
D201
C203
C206
D202
C205
C201
D203
R207
T101
8
1
13
7
C108
Q102
R109
R110
R107
Q101
C110
C111
D101
+
−
R102
C108
C107
R101
C106
L101
5
1
8
4
C102
+212
C213
C214
C202
R201
R202
C207
D206
D205
D204
Q202
C209
Q201
R204
L203
L204
R203
C210
R208
D208
R205
R658
R659
D651
C655
R206
C651
D652
R657
C216
L205
C215
D653
R209
R654
C654
R660
IC651
9 10 11 12 13 14 15 16
8 7 6 5 4 3 2 1
D210
R661
D209
R651
R652
R653
R656
C652
C653
R655
C211
RV651
R212
CN201
5 4 3 2 1
C217
T102
6
8
1
4
C114
Q104
R104
R103
R106
R105
C109
Q103
C112
C113
C104
C103
C105
CN101
3 2 1
C101



UR-14E −SOLDERING SIDE−
1−413−249−12
VO−9600P
VP−9000P

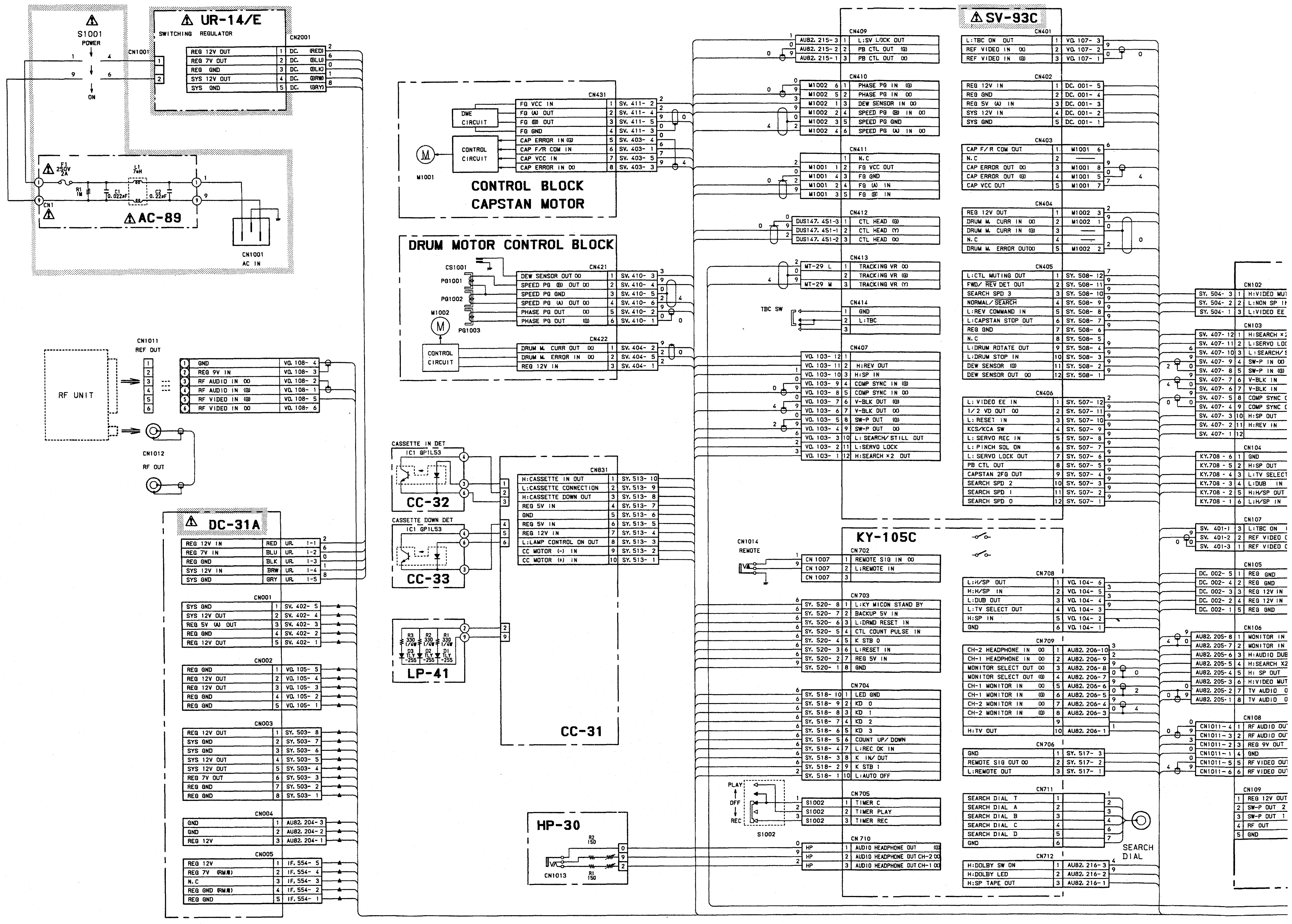
UR-14E:SWITCHING REGULATOR

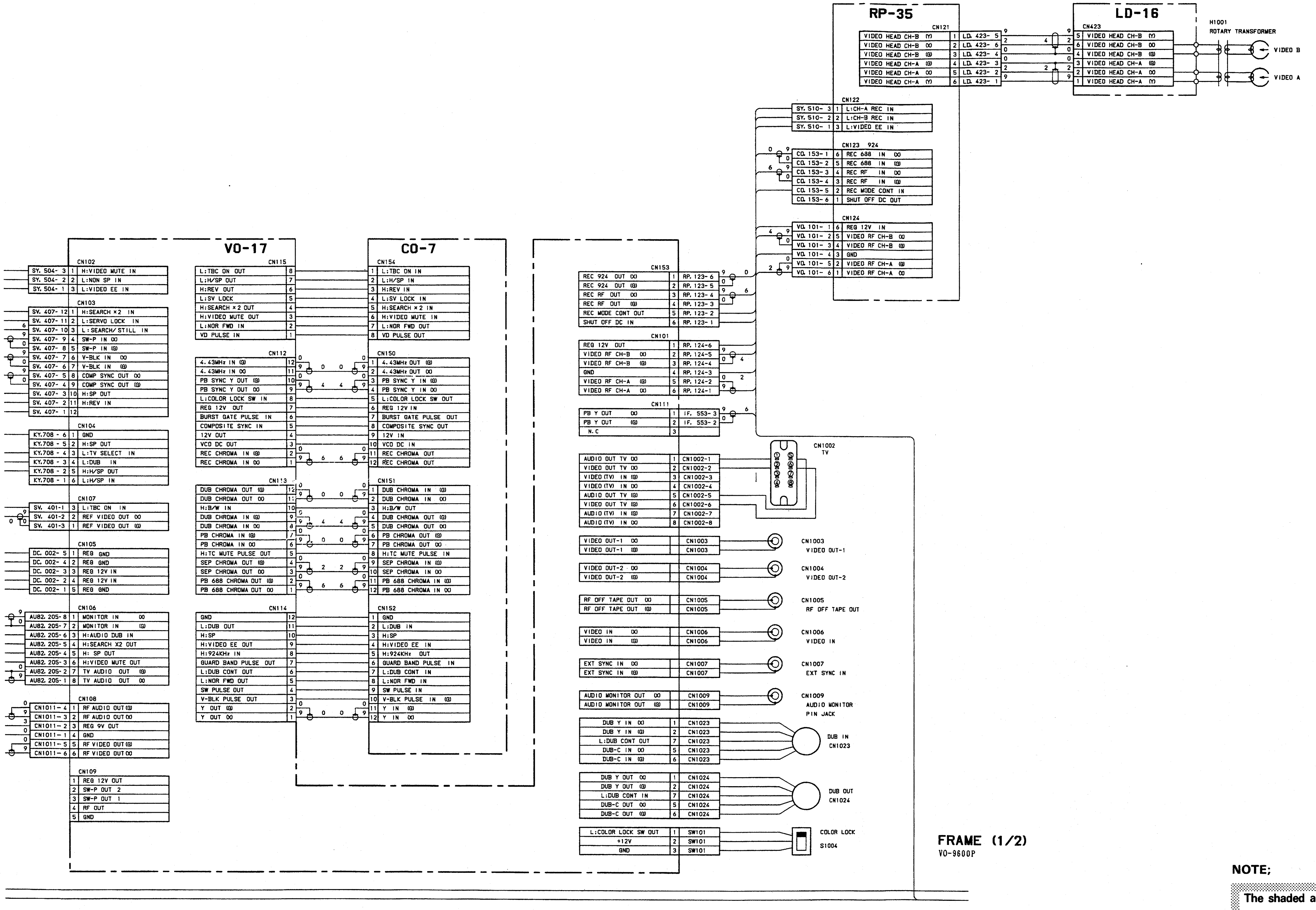

T101
T102
C203 220P 500V
D201 ESAC33-02CS
FB201
FB202
FB203
FB204
C204 220P 500V
C205 220P 500V
D202 ESAC33-02CS
FB205
FB206
FB207
FB208
C201 2200P 200V
C202 2200P 200V
R201 33 (2W)
C206 220P 500V
D203 VO-9C
D204 VO-9C
C207 22 50V
L205
L201
L203
L204
C213 2200 16V
C214 2200 16V
C212 2200 16V
C215 2200 16V
C216 3300 16V
C217 47 16V
R212 220 (1/2W)
CN102
REG 12V
REG 7V
REG GND
SYS 12V
SYS GND
R202 0.02 (2W)
R207 2200 (1/4W)
C209 2200P 200V
Q202 2SA1175
Q201 2SC2458
C210 0.01 50V
R208 470 (1/4W)
R205 3300 (1/4W)
R204 1K (1/4W)
D205 1S2076A
R203 4700 (1W)
D208 RD7.5EL2
D206 RD11EB2
D651 10E-1
R659 820 (1/6W)
R658 33K (1/6W)
R103 220K (1/4W)
R104 220K (1/4W)
R105 1 (1/2W)
C112 100 10V
Q101 2SC3317
Q103 2SD1020
R106 100 (1/4W)
FB101
R107 220K (1/4W)
R108 220K (1/4W)
R109 1 (1/2W)
C114 100 10V
Q102 2SC3317
Q104 2SD1020
R110 100 (1/4W)
FB102
C109 220 200V
C110 4.7 350V
C113 220 200V
C111 4.7 350V
R206 4.7 (1/4W)
D209 RD5.1EB2
C211 0.01 50V
R209 220 (1/4W)
D210 RD5.1EB2
C651 100 16V
D652 RD15EB1
D653 1S2076A
IC651 MB3759
Vcc O.C. VREF
GND RT CT D.C.
R660 2200 (1/6W)
R655 3900 (1/6W)
C655 33 16V
R657 18K (1/6W)
R661 470K (1/6W)
R653 100K (1/6W)
R654 100 (1/6W)
R656 2200 (1/6W)
C653 1000P 50V
C654 0.1 50V
RV651 1K
R651 4700 (1/6W)
C652 3300P 100V
R652 1K (1/6W)
CN101
AC IN
AC IN
R102 3.3 (5W)
D101 LB156
C108 2200P 400V
C105 0.22 250V
L101
C106 0.22 250V
R101 2.7M (1/2W)
C107 2200P 400V
C102 2200P 400V
C104 2200P 400V
C101 2200P 400V
C103 2200P 400V
RV651; REG 12V
UR-14E
1-413-249-12
VO-9600P
VP-9000P

NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

FRAME(1/2)


S1001
POWER
UR-14/E
SWITCHING REGULATOR
AC-89
CN1001
AC IN
RF UNIT
CN1011
REF OUT
CN1012
RF OUT
DC-31A
CONTROL BLOCK
CAPSTAN MOTOR
DME CIRCUIT
CONTROL CIRCUIT
M1001
DRUM MOTOR CONTROL BLOCK
CS1001
PG1001
PG1002
M1002
PG1003
CASSETTE IN DET
CC-32
CASSETTE DOWN DET
CC-33
LP-41
CC-31
HP-30
CN1013
SV-93C
KY-105C
CN1014
REMOTE
TBC SW
S1002
PLAY
OFF
REC
SEARCH DIAL

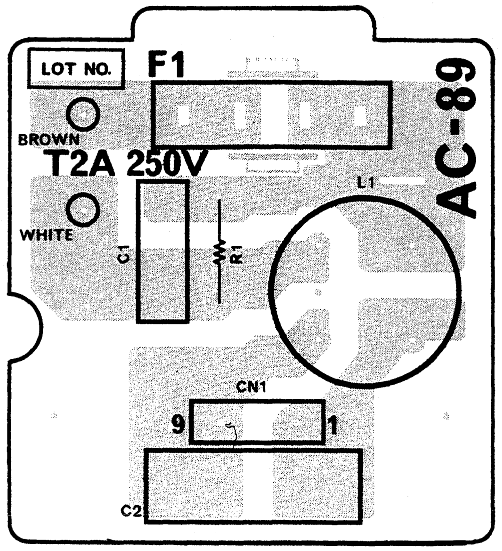

RP-35
LD-16
H1001
ROTARY TRANSFORMER
VIDEO B
VIDEO A
CN121
CN423
CN122
CN123 924
CN124
VO-17
CO-7
CN102
CN103
CN104
CN107
CN105
CN106
CN108
CN109
CN115
CN112
CN113
CN114
CN154
CN150
CN151
CN152
CN153
CN101
CN111
CN1002
TV
CN1003
VIDEO OUT-1
CN1004
VIDEO OUT-2
CN1005
RF OFF TAPE OUT
CN1006
VIDEO IN
CN1007
EXT SYNC IN
CN1009
AUDIO MONITOR
PIN JACK
DUB IN
CN1023
DUB OUT
CN1024
COLOR LOCK
S1004

FRAME (1/2)
VO-9600P

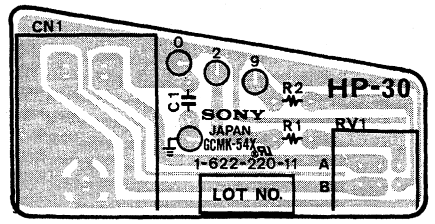
NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

AC-89:AC INPUT
HP-30:HEADPHONES

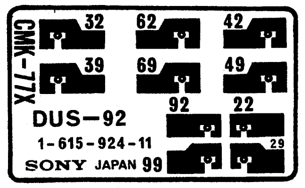

LOT NO.
F1
BROWN
T2A 250V
WHITE
C1
R1
L1
AC-89
CN1
9
1
C2

AC-89
-COMPONENT SIDE-
1-597-748-11
VO-9600P


CN1
0
2
9
R2
HP-30
C1
SONY
R1
RV1
JAPAN
GCMK-54X
1-622-220-11
A
B
LOT NO.

HP-30
-COMPONENT SIDE-
1-622-220-11
VO-9600
VO-9600P
VP-9000
VP-9000P

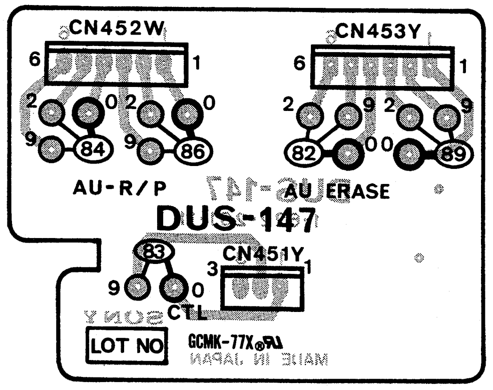
DUS-92:AUDIO CTL HEAD
DUS-147:AUDIO CTL HEAD
MC-28:MIC IN
MT-29:AUDIO LEVEL METER
PT-9:REEL MOTOR DRIVER


CMK-77X
32
62
42
39
69
49
92
22
DUS-92
1-615-924-11
SONY JAPAN 99
29

DUS-92

-SOLDERING SIDE-

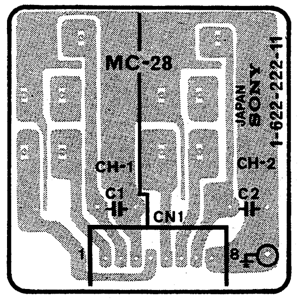
1-615-924-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


CN452W
CN453Y
6
1
2
0
9
84
86
82
89
AU-R/P
AU ERASE
DUS-147
83
CN451Y
3
1
CTL
LOT NO
GCMK-77X

DUS-147

-COMPONENT SIDE-

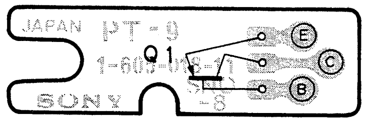
1-622-261-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


MC-28
JAPAN SONY 1-622-222-11
CH-1
CH-2
C1
C2
CN1
1
8
E

MC-28

-COMPONENT SIDE-

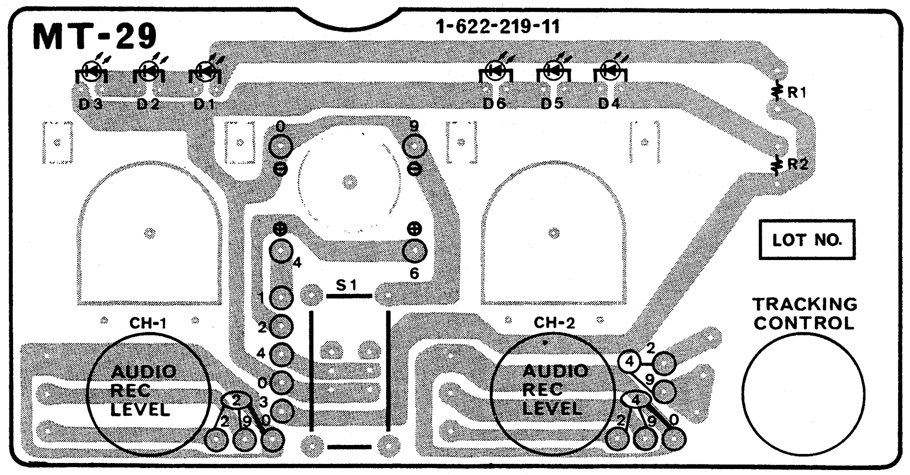
1-622-223-11
VO-9600
VO-9600P


JAPAN
PT-9
Q1
SONY
E
C
B

PT-9

- SOLDERING SIDE -

1-605-018-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

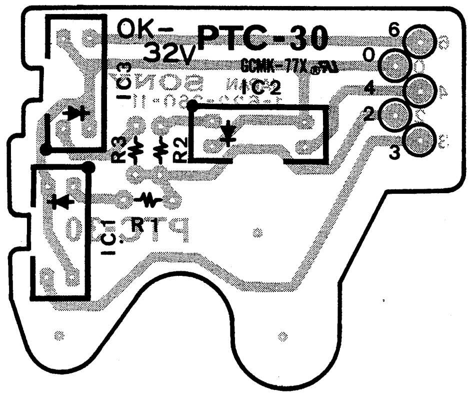

MT-29
1-622-219-11
D3
D2
D1
D6
D5
D4
R1
R2
LOT NO.
S1
CH-1
CH-2
TRACKING CONTROL
AUDIO REC LEVEL
AUDIO REC LEVEL

MT-29

-COMPONENT SIDE-

1-622-219-11
VO-9600
VO-9600P

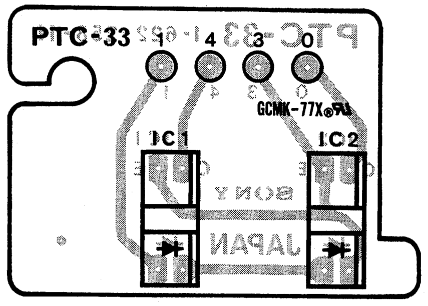
EC-28:CTL HEAD
LM-13:THREADING MOTOR
PTC-30: SP, MISS REC. KCA DETECTOR
PTC-33:FR STOP DETECTOR
PTC-34:UNTHREADING DETECTOR


OK-32V
PTC-30
GCMK-77X
IC2
IC1
R1
R2
R3
C3
6
5
4
2
3

PTC-30

-COMPONENT SIDE-

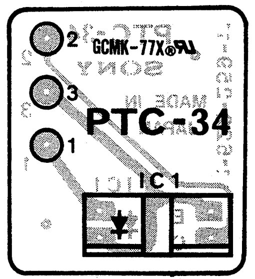
1-622-260-11
VO-9600
VO-9600P
VP-9000
VP-9000P


PTC-33
1
4
3
0
GCMK-77X
IC1
IC2

PTC-33

-COMPONENT SIDE-

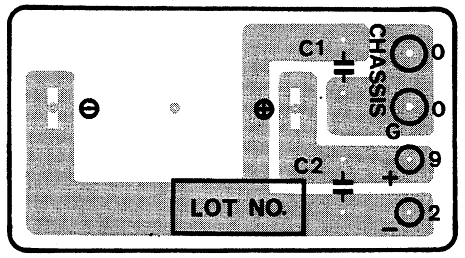
1-622-258-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


2
GCMK-77X
3
1
PTC-34
IC1

PTC-34

-COMPONENT SIDE-

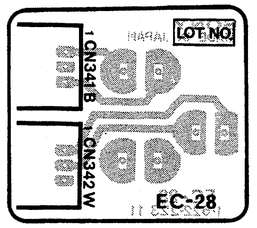
1-622-259-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


C1
CHASSIS
0
C2
9
2
LOT NO.
G

LM-13

-COMPONENT SIDE-

1-618-600-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

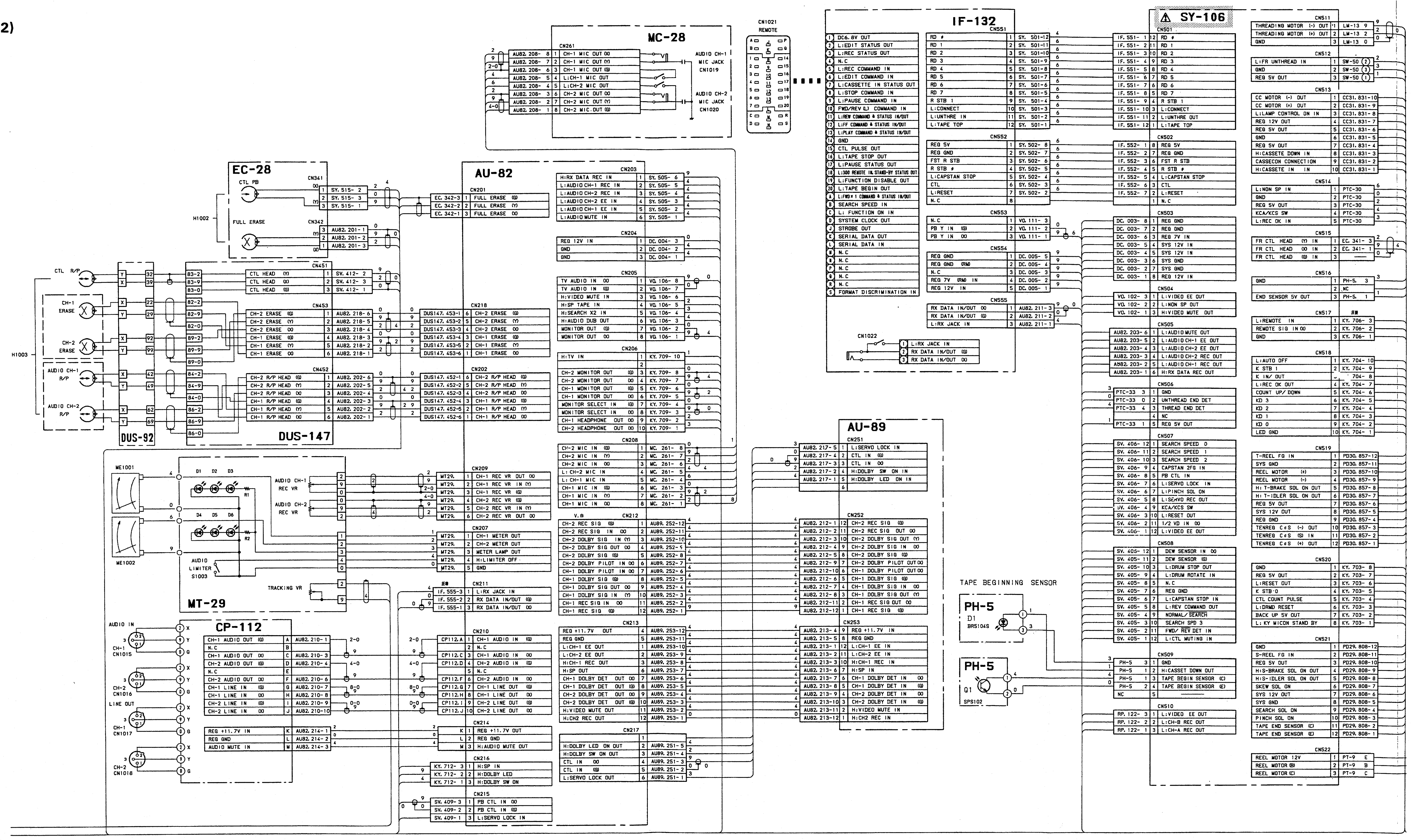

LOT NO
CN341B
CN342W
EC-28

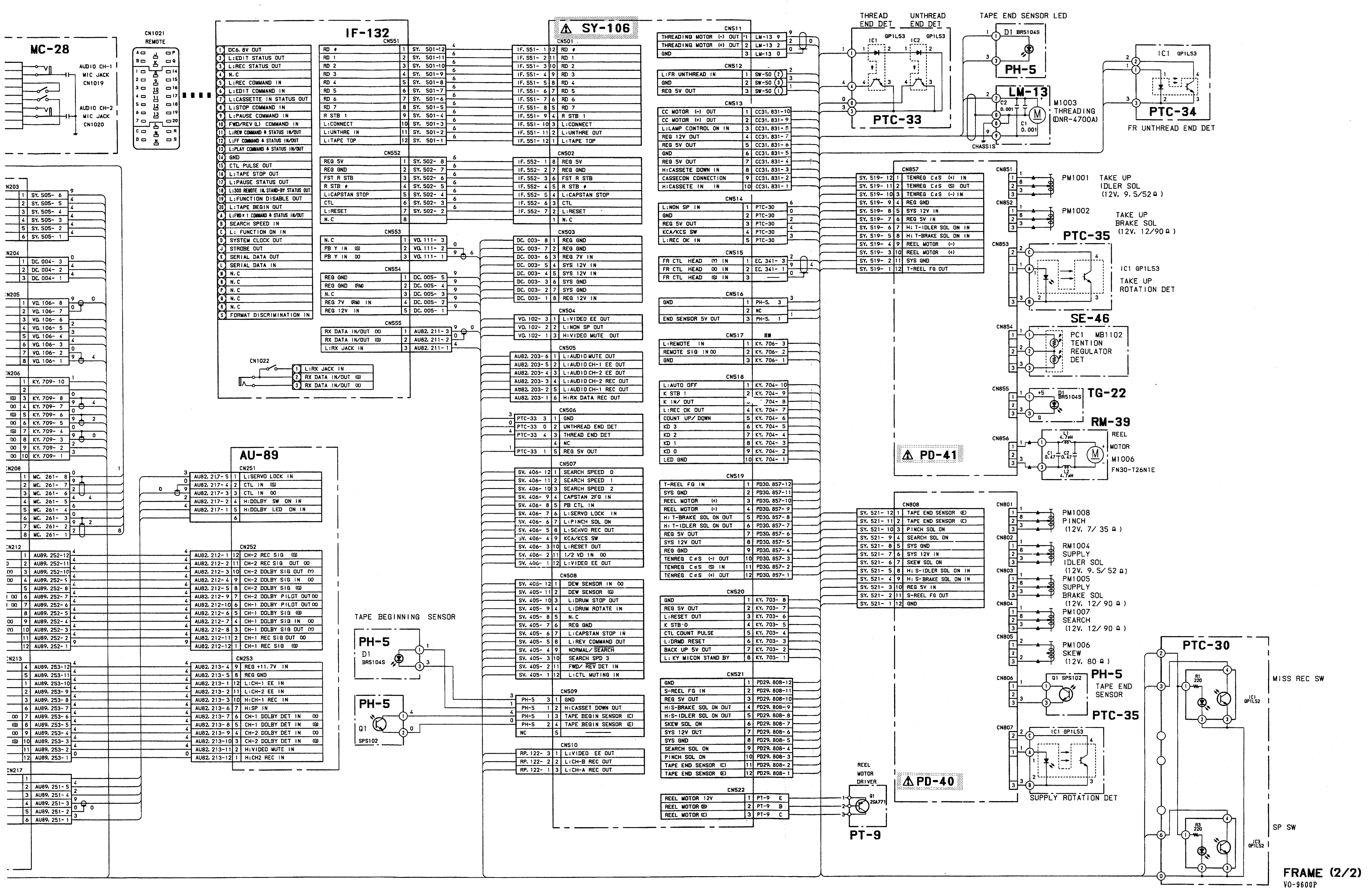
EC-28

-COMPONENT SIDE-

1-622-223-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

FRAME(2/2)


MC-28
CN261
AUDIO CH-1 MIC JACK CN1019
AUDIO CH-2 MIC JACK CN1020
CN1021 REMOTE
IF-132
CN551
CN552
CN553
CN554
CN555
CN1022
⚠ SY-106
CN501
CN502
CN503
CN504
CN505
CN506
CN507
CN508
CN509
CN510
CN511
CN512
CN513
CN514
CN515
CN516
CN517
CN518
CN519
CN520
CN521
CN522
EC-28
CN341
CN342
CTL PB
FULL ERASE
H1002
AU-82
CN201
CN202
CN203
CN204
CN205
CN206
CN207
CN208
CN209
CN210
CN211
CN212
CN213
CN214
CN215
CN216
CN217
CN218
CN451
CN452
CN453
DUS-92
DUS-147
H1003
CTL R/P
CH-1 ERASE
CH-2 ERASE
AUDIO CH-1 R/P
AUDIO CH-2 R/P
MT-29
ME1001
ME1002
AUDIO CH-1 REC VR
AUDIO CH-2 REC VR
AUDIO LIMITER S1003
TRACKING VR
CP-112
AUDIO IN
CH-1 CN1015
CH-2 CN1016
LINE OUT
CH-1 CN1017
CH-2 CN1018
AU-89
CN251
CN252
CN253
TAPE BEGINNING SENSOR
PH-5
D1 BR5104S
PH-5
Q1 SPS102


MC-28
AUDIO CH-1 MIC JACK CN1019
AUDIO CH-2 MIC JACK CN1020
CN1021 REMOTE
IF-132
CN1022
⚠ SY-106
AU-89
TAPE BEGINNING SENSOR
PH-5
THREAD END DET
UNTHREAD END DET
TAPE END SENSOR LED
PTC-33
LM-13
M1003 THREADING (DNR-4700A)
CHASSIS
PTC-34
FR UNTHREAD END DET
PM1001 TAKE UP IDLER SOL (12V, 9.5/52Ω)
PM1002 TAKE UP BRAKE SOL (12V, 12/90Ω)
PTC-35
IC1 GP1L53 TAKE UP ROTATION DET
SE-46
PC1 MB1102 TENTION REGULATOR DET
TG-22
RM-39
REEL MOTOR M1006 FN30-T26N1E
⚠ PD-41
PM1008 PINCH (12V, 7/35Ω)
RM1004 SUPPLY IDLER SOL (12V, 9.5/52Ω)
PM1005 SUPPLY BRAKE SOL (12V, 12/90Ω)
PM1007 SEARCH (12V, 12/90Ω)
PM1006 SKEW (12V, 80Ω)
TAPE END SENSOR
SUPPLY ROTATION DET
REEL MOTOR DRIVER
⚠ PD-40
PT-9
PTC-30
MISS REC SW
SP SW
FRAME (2/2)
VO-9600P

NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

SECTION 15
SPARE PARTS AND FIXTURE

15-1. PARTS INFORMATION

(1)

> The shaded and ⚠ -marked components are critical to safety.
> Replace only with same components as specified.

(2) Replacement Parts supplied from the Sony Parts Center will sometimes have a different shape from the original parts. This is due to "improved parts and/or engineering changes" or "standardization of genuine parts".
This manual's exploded views and electrical spare parts list indicate the part numbers of "the standardized genuine parts at the present". Regarding engineering part changes by the engineering department, refer to Sony service bulletins and service manual supplements.

(3) The parts marked with "s" in the SP column of the exploded views and electrical spare parts lists are normally stocked for replacement purposes. The parts marked with "o" in the SP column are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional delivery time.

(4) Items with no part number and/or no description are not stocked because they are seldom required for routine service.

(5) (T) after a spring description is shown on the exploded views in order to indicate the number of spring turns required for the use. (Example) Spring, tension (24T); This spring must be cut at its 24th turn for actual use.

15-2. EXPLODED VIEW

. Exploded vews are composed of the following blocks.

(1) Reel Chassis (1), Supply Side
    S Reel Table
    S Tension Regulator Arm
    Search Solenoid
    S Main Brake
    Reel Motor
(2) Reel Chassis (2), Take-up Side
    T Reel Table
    FF/REW Idler
    T Main brake
    T Tension Regulator Arm
    R Brake
(3) Reel Chassis (3), Back Side
    S Idler Solenoid
    T Idler Solenoid
    FF/REW Pulley
    S Brake Solenoid
    T Brake Solenoid
(4) Threading Ring Block
    Threading Ring
    Gear Box
    T Correction Guide
    Tape Beginning Sensor
    FR Detector
(5) Threading Arm
    T Drawer Arm
    S Drawer Arm
    S Drawer Roller
    Drawer Lever
(6) Drum and Capstan Blocks
    Head Drum
    Capstan Motor
    Audio/ CTL Head
    Tape Guides

(7) Erase Head Base
  - Erase Head Base
  - S Guard

(8) Pinch Lever and Pinch Solenoid Blocks
  - Pinch Lever
  - Pinch Roller Pre-set Cam
  - Pinch Solenoid

(9) Cassette-up Compartment Block

(10) Function Control
  - Function Control Board

(11) Front Panel Block
  - Ornamental Front Panel
  - Key Top

(12) Chassis Block (1), Left Side
  - Printed Circuit Boards

(13) Chassis Block (2), Back Side
  - Printed Circuit Boards
  - Connector Panel for Video Signal

(14) Level Control Panel
  - Meter Panel
  - Headphone Block

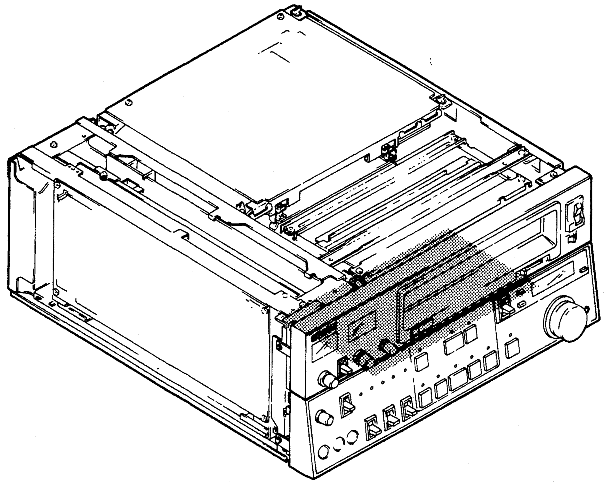
(15) Switching Regulator

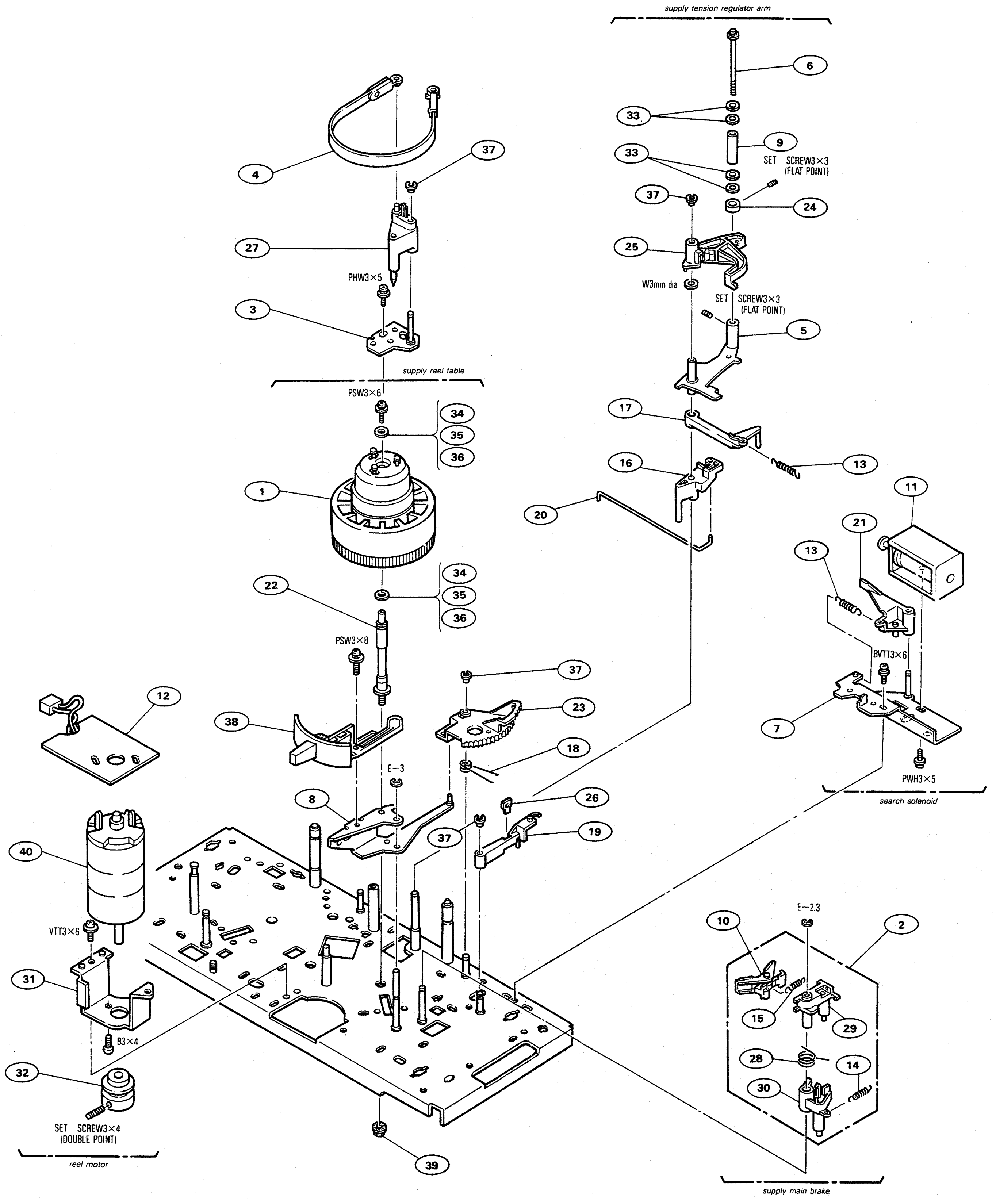
(16) Connector Panel for Audio Signal

(17) Chassis Block (3), Bottom
  - Printed Circuit Boards

(18) Ornamental Panel Block
  - U Case
  - Bottom Plate

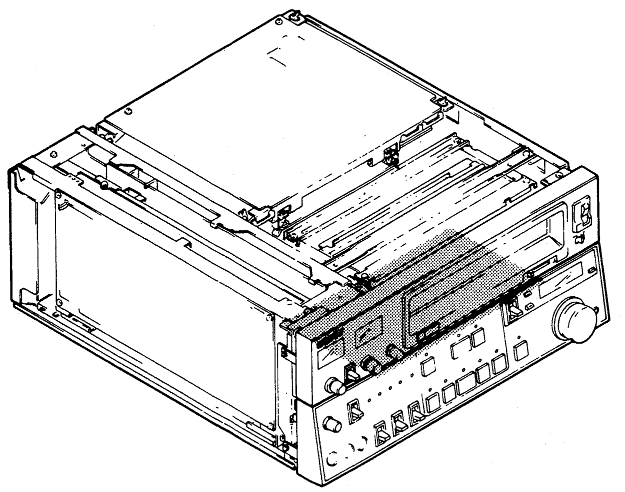
REEL CHASSIS (1), SUPPLY SIDE

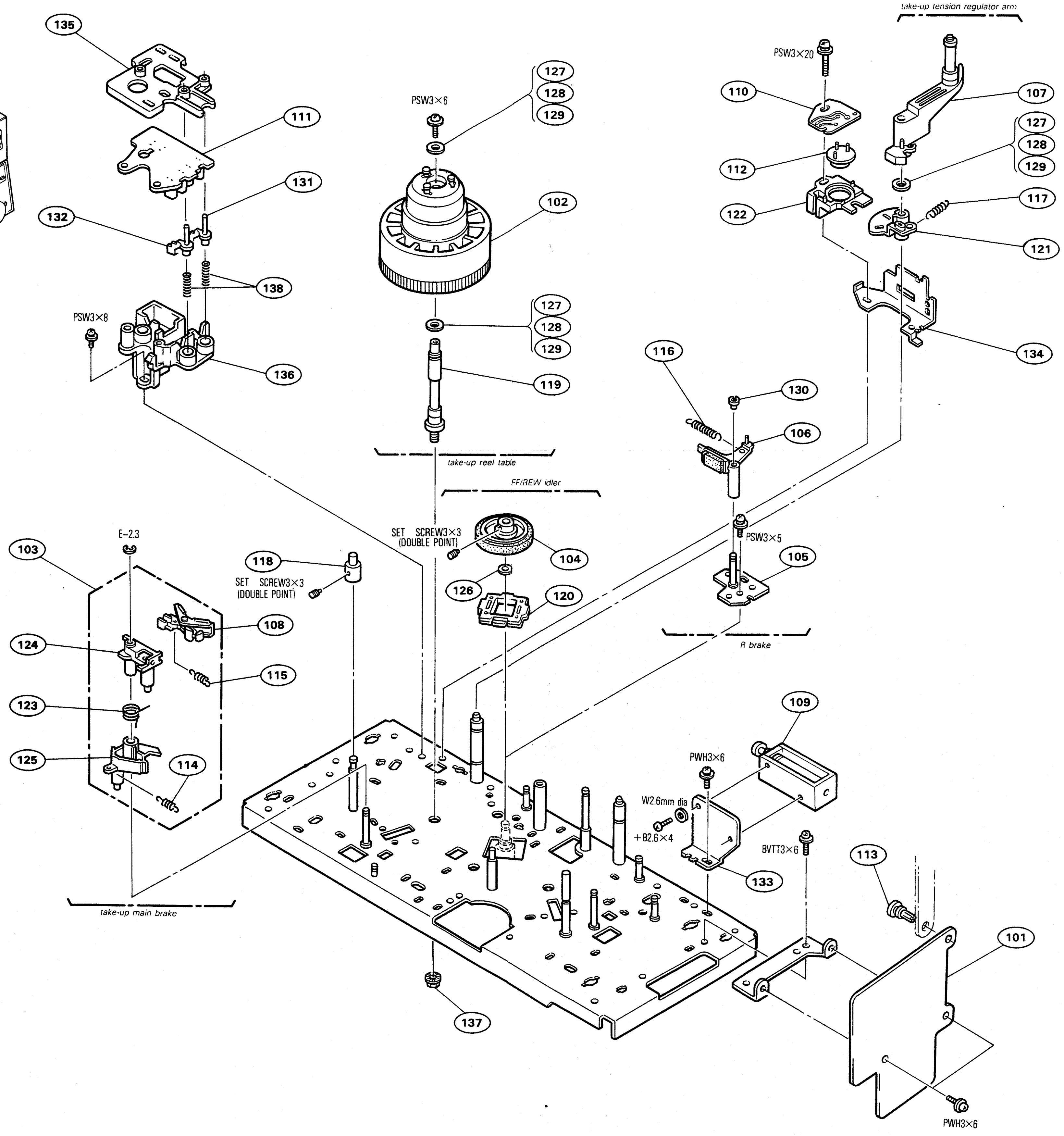



supply tension regulator arm
6
33
33
9
SET SCREW3×3 (FLAT POINT)
37
24
25
W3mm dia
SET SCREW3×3 (FLAT POINT)
5
4
37
27
PHW3×5
3
supply reel table
PSW3×6
34
35
36
1
34
35
36
22
PSW3×8
17
16
13
20
11
21
13
BVTT3×6
7
PWH3×5
search solenoid
12
38
37
23
18
E-3
8
26
37
19
40
VTT3×6
31
B3×4
32
SET SCREW3×4 (DOUBLE POINT)
reel motor
39
10
E-2.3
2
15
29
28
14
30
supply main brake

No.	Part No.	SP	Description
1	A-6739-016-C	s	TABLE ASSY, REEL
2	A-6741-038-B	s	BRAKE ASSY, MAIN
3	X-3668-706-0	o	BASE ASSY, S TENSION REGULATOR
4	X-3668-707-0	s	BAND ASSY, S TENSION REGULATOR
5	X-3668-708-0	s	ARM(A)ASSY, S TENSION REGULATOR
6	X-3668-709-0	s	SHAFT (1) ASSY, ROLLER
7	X-3668-717-0	o	BASE ASSY, SEARCH
8	X-3668-725-0	o	ARM (C) ASSY, SKEW
9	X-3668-727-0	s	GUIDE ASS'Y, TAPE
10	X-3668-749-0	s	HOLDER ASSY, LINING
11	1-454-417-31	s	SOLENOID, PLUNGER
12	1-618-873-11	o	PRINTED CIRCUIT BOARD, RM-39
13	3-534-238-XX	s	SPRING, TENSION (23T)
14	3-535-369-XX	s	SPRING, TENSION (12T)
15	3-548-124-00	s	SPRING, TENSION
16	3-668-787-02		ARM, S DETECTION
17	3-668-794-00	o	ARM (A), SKEW
18	3-668-795-00	s	SPRING
19	3-668-797-00	o	ARM, SKEW LOCK
20	3-668-804-00	s	LINK, DETECTION TENSION
21	3-668-808-00	s	ARM, FWD, SEARCH
22	3-668-827-00	o	SHAFT (S), REEL
23	3-668-835-00	s	ARM (B), SKEW
24	3-668-874-00	s	FLANGE (1), LOWER
25	3-668-936-00	s	ARM (B), S TENSION REGULATOR
26	3-668-937-00	s	CLAW, SKEW LOCK
27	3-668-939-00	o	ARM, BAND LOCK
28	3-668-966-00	s	SPRING
29	3-668-970-00	o	ARM, BRAKE
30	3-668-971-00	o	ARM, BRAKE RELEASE
31	3-672-743-01	o	BRACKET, MOTOR
32	3-672-744-01	s	PULLEY (R), MOTOR
33	3-701-438-01	s	WASHER, POLY 2.5MM DIA., 0.25T
34	3-701-444-01	s	WASHER, POLY 6MM DIA., 0.13T
35	3-701-444-11	s	WASHER, POLY 6MM DIA., 0.25T
36	3-701-444-21	s	WASHER, POLY 6MM DIA., 0.50T
37	3-703-074-00	s	CAP 3, SHAFT
38	3-718-337-01	s	LEVER, SKEW
39	4-304-749-00	o	NUT, FLANGE
40	8-835-178-01	s	MOTOR, DC FN30-T26N1E

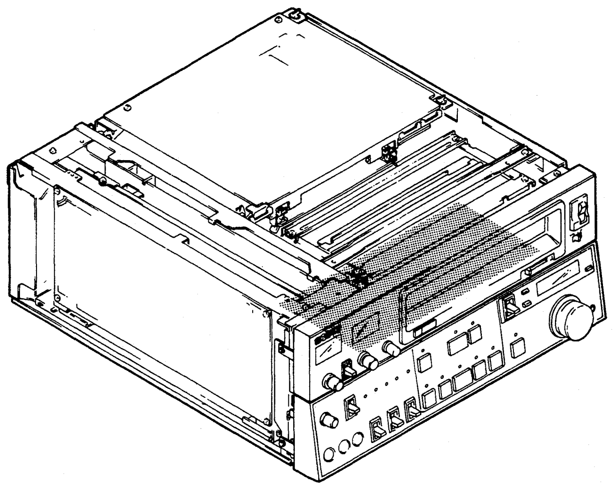
REEL CHASSIS (2), TAKE-UP SIDE

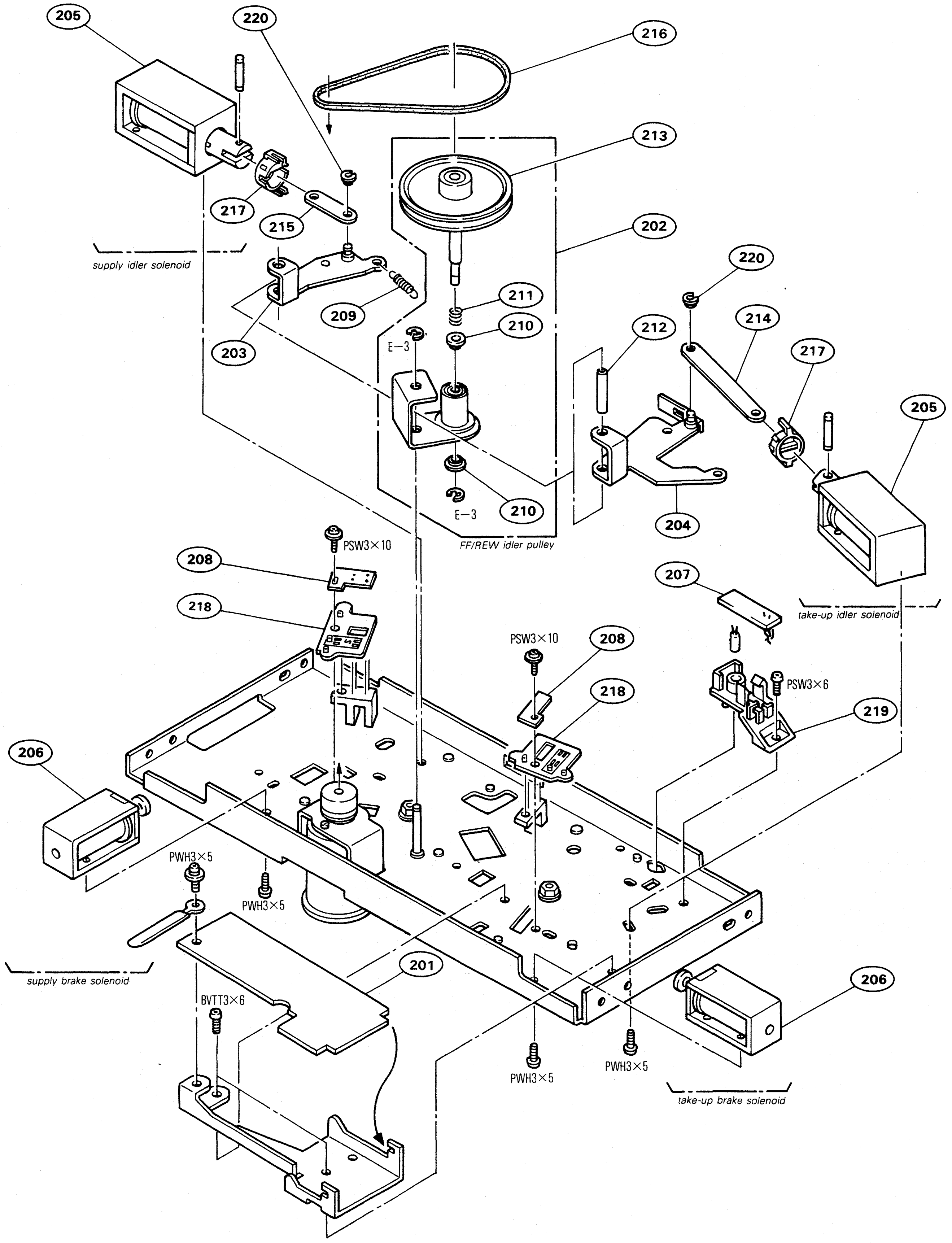



135
111
131
132
138
PSW3×8
136
PSW3×6
127
128
129
102
127
128
129
119
take-up reel table
FF/REW idler
SET SCREW3×3 (DOUBLE POINT)
104
126
120
118
SET SCREW3×3 (DOUBLE POINT)
108
115
103
E-2.3
124
123
125
114
take-up main brake
take-up tension regulator arm
PSW3×20
110
107
127
128
129
112
122
117
121
134
116
130
106
PSW3×5
105
R brake
109
PWH3×6
W2.6mm dia
+B2.6×4
BVTT3×6
133
113
101
137
PWH3×6

No.	Part No.	SP	Description
101	A-6725-569-A	o	MOUNTED CIRCUIT BOARD, PD-40
102	A-6739-016-C	s	TABLE ASS'Y, REEL
103	A-6741-038-B	s	BRAKE ASS'Y, MAIN
104	X-3646-026-0	s	IDLER ASS'Y, FF
105	X-3668-705-0	o	BASE ASS'Y, R BRAKE
106	X-3668-737-0	s	BRAKE ASS'Y, R
107	X-3668-738-0	s	ARM ASS'Y, T TENSION REGULATOR
108	X-3668-749-0	s	HOLDER ASS'Y, LINING
109	1-454-446-11	s	SOLENOID, PLUNGER
110	1-618-599-11	o	PRINTED CIRCUIT BOARD, SE-46
111	1-622-260-11	o	PRINTED CIRCUIT BOARD, PTC-30
112	1-806-232-21	s	DETECTOR MB-1102/S.N
113	2-382-416-01	o	SUPPORT, PC
114	3-535-369-XX	s	SPRING, TENSION (12T)
115	3-548-124-00	s	SPRING, TENSION
116	3-549-861-00	s	SPRING, TENSION
117	3-642-427-00	s	SPRING, TENSION
118	3-668-031-00	o	RETAINER (UPPER), CASSETTE
119	3-668-766-00	o	SHAFT (T), REEL
120	3-668-780-00	o	CUSHION, IDLER
121	3-668-788-00	s	ART, T DETECTION
122	3-668-789-00	o	HOLDER, BRIDGE, PHOTO
123	3-668-966-00	s	SPRING
124	3-668-970-00	o	ARM, BRAKE
125	3-668-971-00	o	ARM, BRAKE RELEASE
126	3-701-441-21	s	WASHER, POLY 4MM DIA., 0.50T
127	3-701-444-01	s	WASHER, POLY 6MM DIA., 0.13T
128	3-701-444-11	s	WASHER, POLY 6MM DIA., 0.25T
129	3-701-444-21	s	WASHER, POLY 6MM DIA., 0.50T
130	3-703-074-00	s	CAP 3, SHAFT
131	3-718-307-01	s	ACTUATOR, TRC
132	3-718-307-11	s	ACTUATOR, TRC
133	3-718-308-01	o	BRACKET, SK SOLENOID
134	3-718-326-01	o	STOPPER (SP)
135	3-718-342-01	o	TRC-BOX (UPPER)
136	3-718-343-01	o	TRC-BOX (LOWER)
137	4-304-749-00	o	NUT, FLANGE
138	4-858-779-00	s	SPRING, COMPRESSION

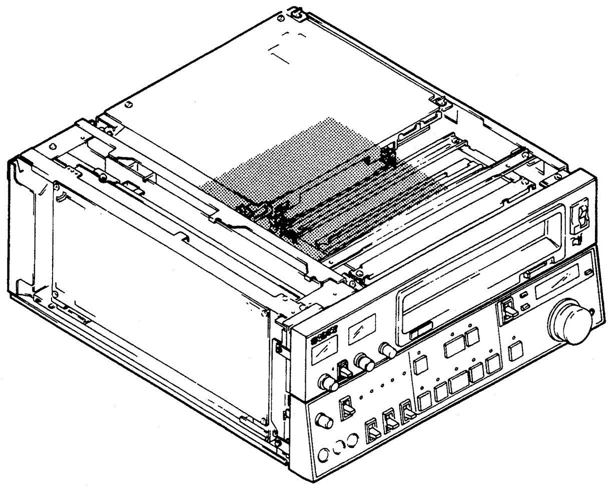
REEL CHASSIS (3), BACK SIDE

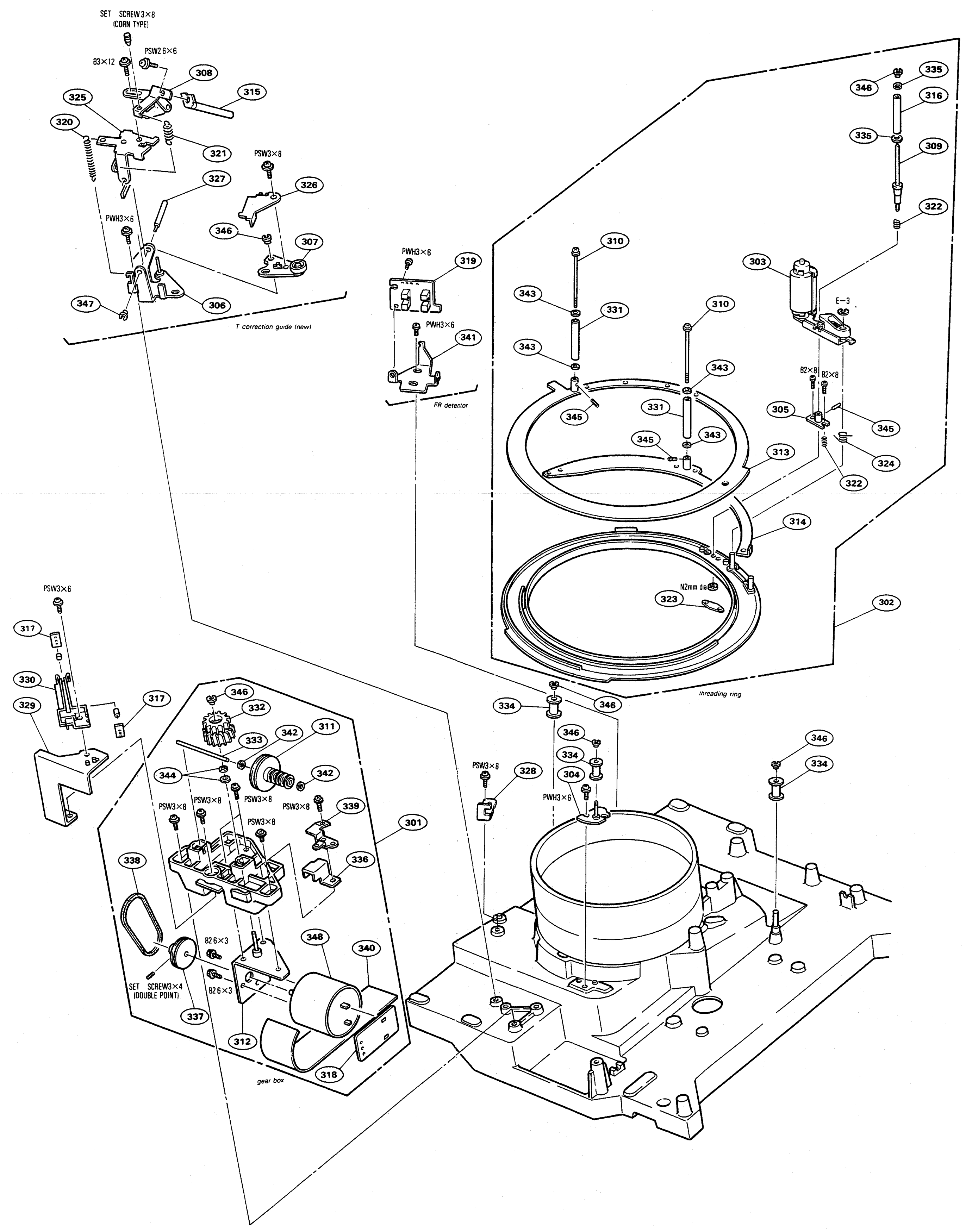



205
220
216
213
202
217
215
209
203
211
210
E-3
212
214
220
217
205
210
E-3
204
FF/REW idler pulley
supply idler solenoid
PSW3×10
208
218
207
take-up idler solenoid
PSW3×10
208
218
PSW3×6
219
206
PWH3×5
PWH3×5
supply brake solenoid
201
BVTT3×6
206
PWH3×5
PWH3×5
take-up brake solenoid

No.	Part No.	SP	Description
201	A-6725-570-A	o	MOUNTED CIRCUIT BOARD, PD-41
202	A-6740-069-B	s	PULLEY BLOCK, ASS'Y, IDLER
203	X-3668-703-0	o	LEVER ASS'Y, S
204	X-3668-704-0	o	LEVER ASS'Y, T
205	1-454-415-11	s	SOLENOID, PLUNGER
206	1-454-417-31	s	SOLENOID, PLUNGER
207	1-618-597-11	o	PRINTED CIRCUIT BOARD, TG-22
208	1-622-218-11	o	PRINTED CIRCUIT BOARD, PTC-35
209	3-437-452-00	s	SPRING, TENSION
210	3-650-512-00	s	COLLAR, (A)
211	3-651-572-00	s	SPRING, COMPRESSION
212	3-668-048-11	o	SPACER (DIA. 4x20)
213	3-668-772-00	s	SHAFT, IDLER PULLEY
214	3-668-781-00	o	JOINT, T
215	3-668-782-00	o	JOINT, S
216	3-668-785-00	s	BELT (67x2)
217	3-668-826-00	s	RETAINER, PIN, SOLENOID
218	3-668-828-02	o	BRACKET, PS
219	3-672-752-01	o	HOLDER, LED
220	3-703-074-00	s	CAP 3, SHAFT

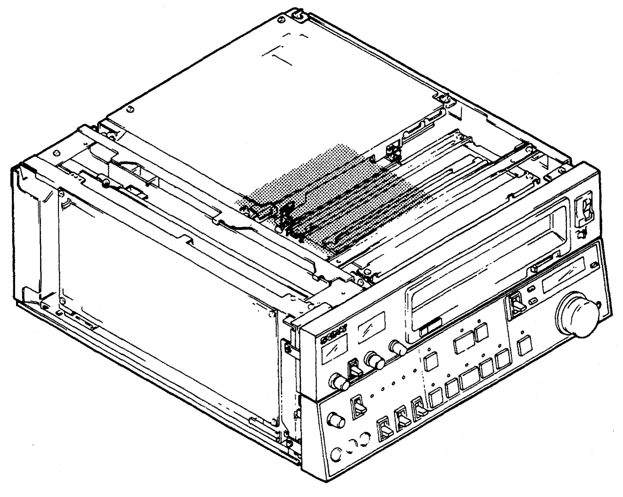
THREADING RING BLOCK

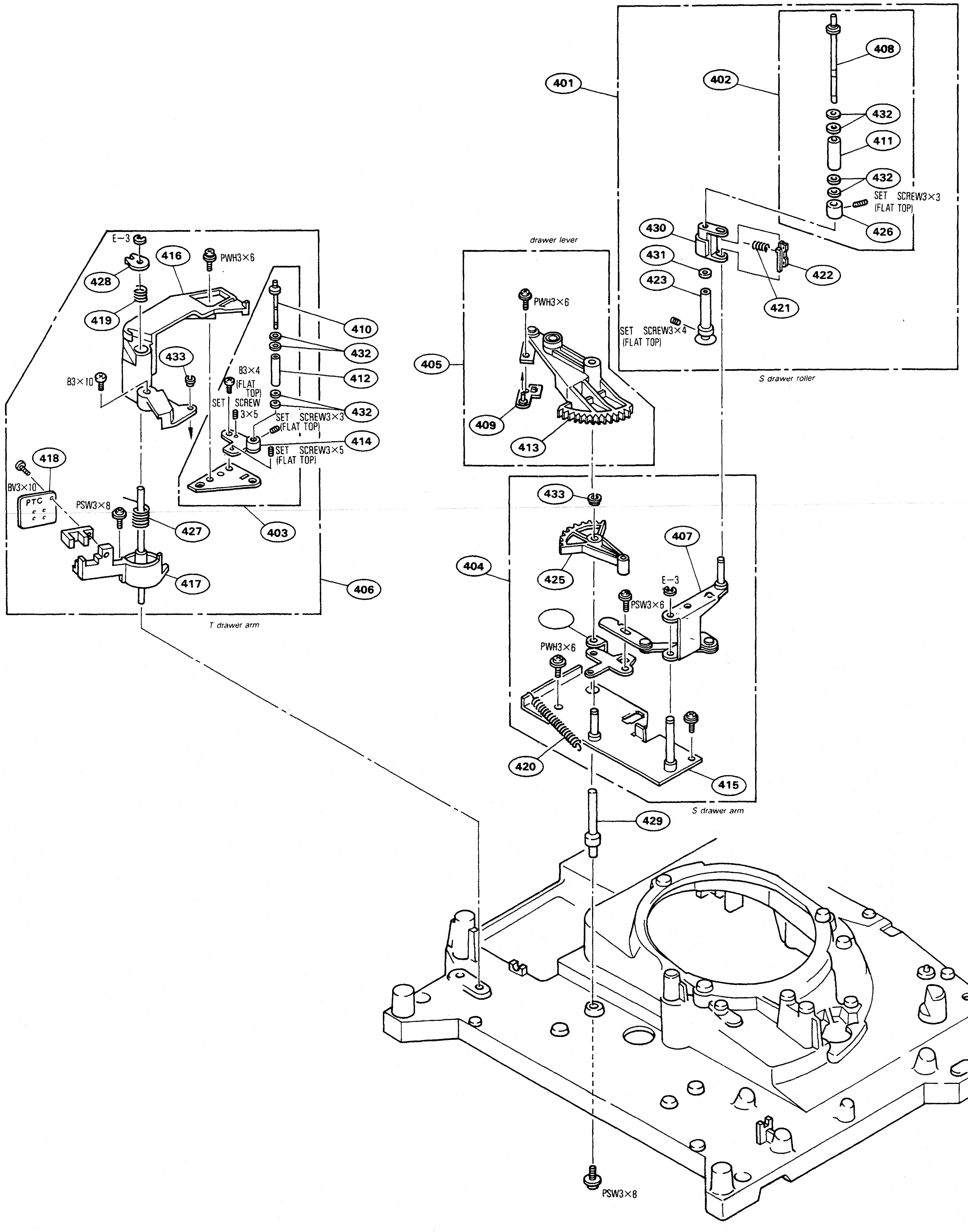



SET SCREW3×8 (CORN TYPE)
PSW2.6×6
B3×12
308
315
325
320
321
PSW3×8
327
326
PWH3×6
346
307
347
306
T correction guide (new)
PWH3×6
319
PWH3×6
341
FR detector
346
335
316
335
309
322
310
303
343
331
310
E-3
343
343
B2×8
B2×8
331
305
345
345
343
345
313
324
322
314
N2mm dia
323
302
threading ring
PSW3×6
317
330
329
317
346
332
333
342
311
344
342
PSW3×8
PSW3×8
PSW3×8
PSW3×8
339
PSW3×8
301
338
336
B2.6×3
348
340
B2.6×3
SET SCREW3×4 (DOUBLE POINT)
337
312
318
gear box
334
346
346
334
PSW3×8
328
304
PWH3×6
346
334

No.	Part No.	SP	Description
301	A-6750-219-A	s	BOX BLOCK ASS'Y, GEAR
302	A-6750-220-A	s	RING BLOCK ASS'Y, MAIN
303	A-6750-226-A	s	PINCH ROLLER BLOCK ASS'Y
304	X-3668-719-0	o	ROLLER ASS'Y, RING
305	X-3668-720-0	o	BASE ASS'Y, ROLLER, PRECEDING
306	X-3668-721-0	o	CHASSIS ASS'Y, GUIDE
307	X-3668-722-0	s	LOCKER ASS'Y, FR
308	X-3668-723-2	o	ARM ASS'Y, GUIDE, T CORRECTION
309	X-3668-724-3	s	SHAFT ASS'Y, ROLLER, PRECEDING
310	X-3668-733-0	s	SHAFT ASS'Y, SR GUIDE
311	X-3668-743-0	s	PULLEY ASS'Y, WORM
312	X-3672-704-1	o	BRACKET ASS'Y, MOTOR
313	X-3672-710-1	o	RING (UPPER) ASS'Y, SUB
314	X-3672-711-1	o	RING (LOWER) ASS'Y, SUB
315	X-3672-718-2	s	SHAFT ASS'Y, GUIDE
316	X-3718-303-1	s	GUIDE ASS'Y, (T), TAPE
317	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5
318	1-618-600-11	o	PRINTED CIRCUIT BOARD, LM-13
319	1-622-258-11	o	PRINTED CIRCUIT BOARD, PTC-33
320	3-143-067-00	s	SPRING, TENSION
321	3-437-289-00	s	SPRING, TENSION
322	3-634-196-00	s	SPRING
323	3-668-743-00	o	NUT, PLATE, ROLLER, PRECEDING
324	3-668-745-00	s	SPRING
325	3-668-749-02	o	ARM (A), GUIDE, T CORRECTION
326	3-668-753-00	o	PLATE, ADJUSTMENT, FR LOCKER
327	3-668-754-00	o	SHAFT, GUIDE ARM, T CORRECTION
328	3-668-755-00	o	PLATE, STOPPER SR
329	3-668-900-00	o	BRACKET, T SENSOR
330	3-668-901-00	s	HOLDER, T PHOTO
331	3-668-919-00	s	ROLLER, SR GUIDE
332	3-668-947-00	s	PINION, L
333	3-668-948-00	o	SHAFT WORM
334	3-668-963-00	s	ROLLER, RING
335	3-669-926-01	s	WASHER (3), THRUST
336	3-669-960-00	o	RETAINER, SHAFT
337	3-672-736-01	s	PULLEY, LM
338	3-672-737-01	s	BELT SQUARE
339	3-672-738-01	o	PLATE GROUND SLED
340	3-672-739-01	o	BELT, LM SHIELD
341	3-672-790-01	o	BRAKET, FR DETECTION
342	3-701-437-21	s	WASHER, POLY 2MM DIA., 0.50T
343	3-701-438-11	s	WASHER, POLY 2.5MM DIA., 0.25T
344	3-701-439-21	s	WASHER, POLY 3MM DIA., 0.50T
345	3-701-505-00	s	SET SCREW, DUBLE POINT 3x3
346	3-703-074-00	s	CAP 3, SHAFT
347	3-703-075-00	s	CAP 2, SHAFT
348	1-541-376-11	s	MOTOR, DC (DNR-4700A)

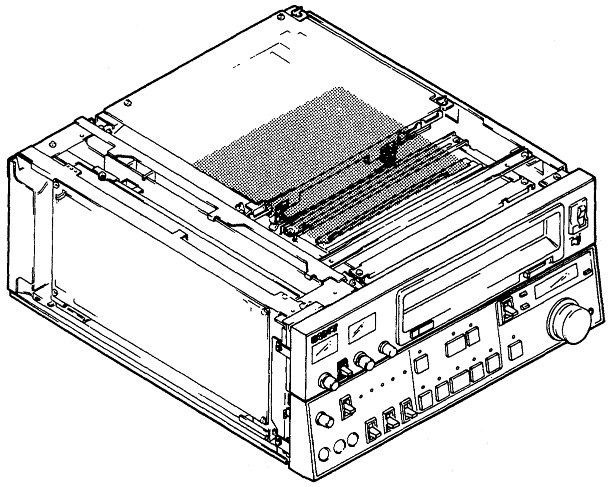
THREADING ARM

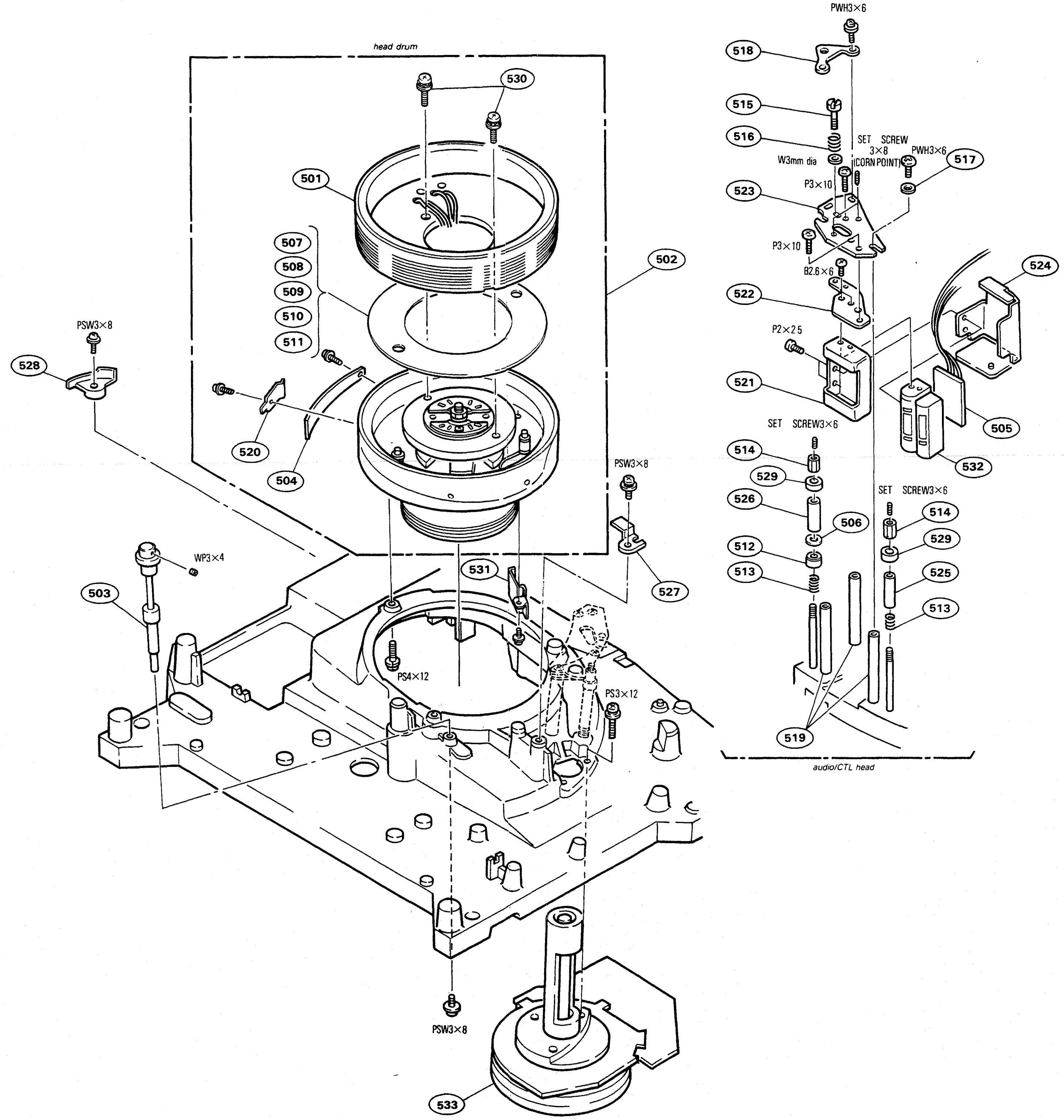



E-3
416
PWH3×6
428
419
433
B3×10
B3×4
(FLAT TOP)
SET SCREW 3×5
SET SCREW3×3 (FLAT TOP)
SET SCREW3×5 (FLAT TOP)
410
432
412
432
414
418
BV3×10
PTC
PSW3×8
427
403
417
406
T drawer arm
401
402
408
432
411
432
SET SCREW3×3 (FLAT TOP)
426
430
431
423
422
421
SET SCREW3×4 (FLAT TOP)
S drawer roller
drawer lever
PWH3×6
405
409
413
433
407
404
425
E-3
PSW3×6
PWH3×6
420
415
S drawer arm
429
PSW3×8

No.	Part No.	SP	Description
401	A-6746-021-C	s	ROLLER BLOCK ASS'Y, S DRAWER
402	A-6746-034-A	s	ROLLER BLOCK ASS'Y, (2) DRAWER
403	A-6746-045-A	s	ROLLER BLOCK ASS'Y, T GUIDE
404	A-6750-201-A	o	ARM BLOCK ASS'Y, S DRAWER
405	A-6750-202-A	o	LEVER BLOCK ASS'Y, DRAWER
406	A-6750-218-A	o	ARM BLOCK ASS'Y, T DRAWER
407	X-3668-711-0	o	ARM ASS'Y, S DRAWER
408	X-3668-712-3	s	SHAFT (2) ASS'Y, ROLLER
409	X-3668-713-0	o	LINK (B) ASS'Y, DRIVING
410	X-3668-716-0	s	SHAFT (3) ASS'Y, ROLLER
411	X-3668-718-0	s	GUIDE ASS'Y, TAPE
412	X-3668-727-0	o	GUIDE ASS'Y, TAPE
413	X-3668-729-0	s	LEVER ASS'Y, DRAWER
414	X-3672-705-1	o	PLATE ASS'Y, GUIDE, T
415	X-3672-706-1	o	BASE ASS'Y, S DRAWER ARM
416	X-3672-708-1	o	ARM ASS'Y, T DRAWER
417	X-3718-305-1	o	RITAINER ASS'Y, ARM, T DRAWER
418	1-622-259-11	o	PRINTED CIRCUIT BOARD, PTC-34
419	3-534-854-00	s	SPRING, COMPRESSION
420	3-540-506-00	s	SPRING, TENSION
421	3-644-718-00	s	SPRING, COMPRESSION
422	3-668-718-00	s	RETAINER, SPRING, S DRAWER
423	3-668-719-00	s	HOLDER (L), S GUIDE
424	3-668-720-00	o	LIMITER, S DRAWER
425	3-668-721-00	s	ARM, S DRIVING
426	3-668-724-00	o	FLANGE (2), LOWER
427	3-668-734-00	o	SPRING
428	3-668-735-00	s	RETAINER, SPRING
429	3-668-760-00	s	SHAFT, DRAWER LEVER
430	3-668-833-00	s	HOLDER (M), GUIDE, S
431	3-669-946-00	s	RING (P4), O
432	3-701-438-01	s	WASHER, POLY 2.5MM DIA., 0.13T
433	3-703-074-00	s	CAP 3, SHAFT

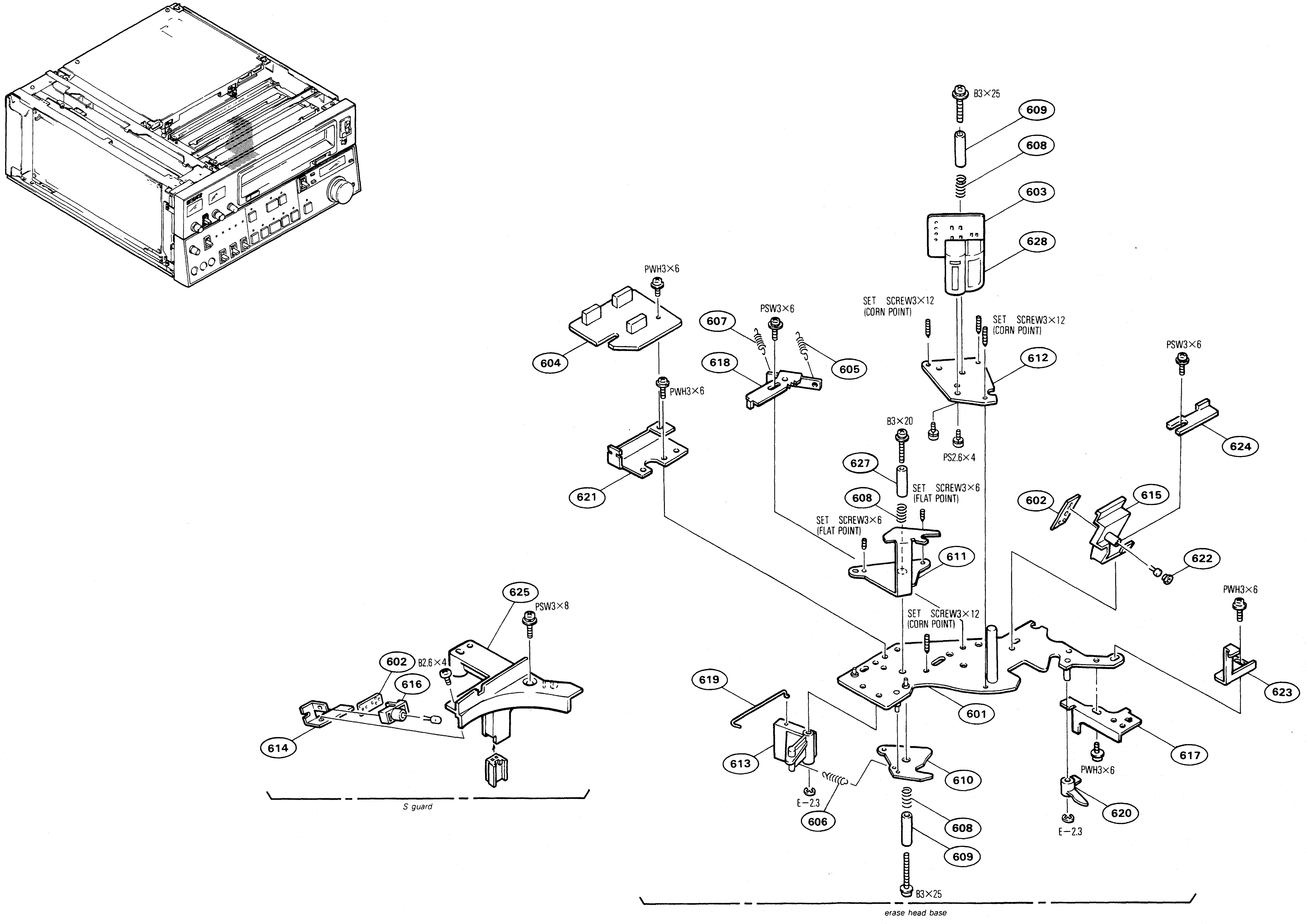
DRUM AND CAPSTAN BLOCKS




head drum
530
501
507
508
509
510
511
502
520
504
PSW3×8
528
WP3×4
503
531
PS4×12
PS3×12
PSW3×8
527
PSW3×8
533
PWH3×6
518
515
516
SET SCREW
3×8
(CORN POINT)
W3mm dia
P3×10
PWH3×6
517
523
P3×10
B2.6×6
524
522
P2×25
521
505
SET SCREW3×6
514
529
532
526
506
SET SCREW3×6
514
529
512
525
513
513
519
audio/CTL head

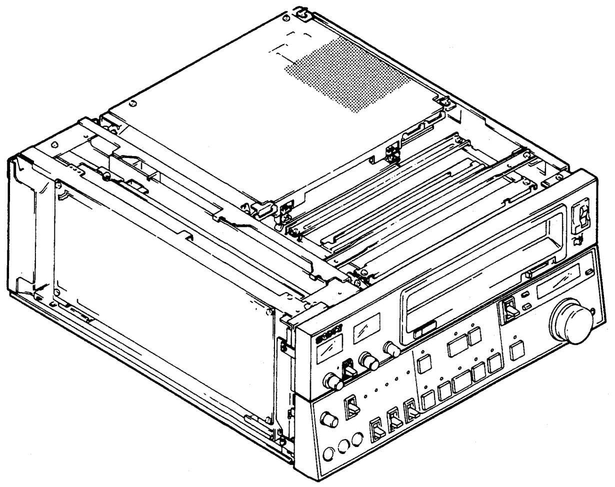
No.	Part No.	SP	Description
501	A-6709-601-A	s	UPPER DRUM ASS'Y, DUR-42-R
502	A-6709-606-A	s	HEAD DRUM ASS'Y, DUH-42A-R
503	A-6746-052-A	s	ROLLER ASS'Y, GUIDE, TAPE
504	1-586-633-00	s	DETECTOR, DEW
505	1-615-924-11	o	PRINTED CIRCUIT BOARD, DUS-92
506	3-534-329-11	s	WASHER, TAPE GUIDE
507	3-630-029-01	s	SPACER, FLANGE (0.01T)
508	3-630-029-11	s	SPACER, FLANGE (0.02T)
509	3-630-029-21	s	SPACER, FLANGE (0.05T)
510	3-630-029-31	s	SPACER, FLANGE (0.1T)
511	3-630-029-41	s	SPACER, FLANGE (0.03T)
512	3-641-612-00	s	GUIDE, TAPE
513	3-641-615-00	s	SPRING, COMPRESSION
514	3-641-616-00	s	NUT, TAPE GUIDE ADJUSTMENT
515	3-641-621-00	s	SCREW, HEAD ADJUSTMENT
516	3-641-622-00	s	SPRING, COMPRESSION
517	3-645-076-00	o	WASHER, M-REEL S
518	3-647-815-00	o	PLATE, ADJUSTMENT, CTL HEAD
519	3-647-816-00	o	POLE, SUPPORT, CTL BRACKET
520	3-655-631-00	o	TERMINAL, GRUND
521	3-655-675-02	o	CASE (F), AU
522	3-655-676-01	o	BRACKET (A), CTL HEAD
523	3-655-677-01	o	BRACKET (B), CTL HEAD
524	3-655-678-03	o	CASE (B), AU
525	3-672-730-01	s	TG-3
526	3-672-731-01	s	TG-4
527	3-672-762-01	o	PIN, DRUM
528	3-672-763-01	o	CAM, P OFFSET PREVENTION
529	3-688-807-01	s	FRANGE, TAPE GUIDE
530	7-672-163-01	s	SCREW
531	3-710-826-01	o	SHIELD, CN
532	8-825-578-21	s	ACE HEAD
533	8-835-258-01	s	MOTOR, DC BHF-1915B

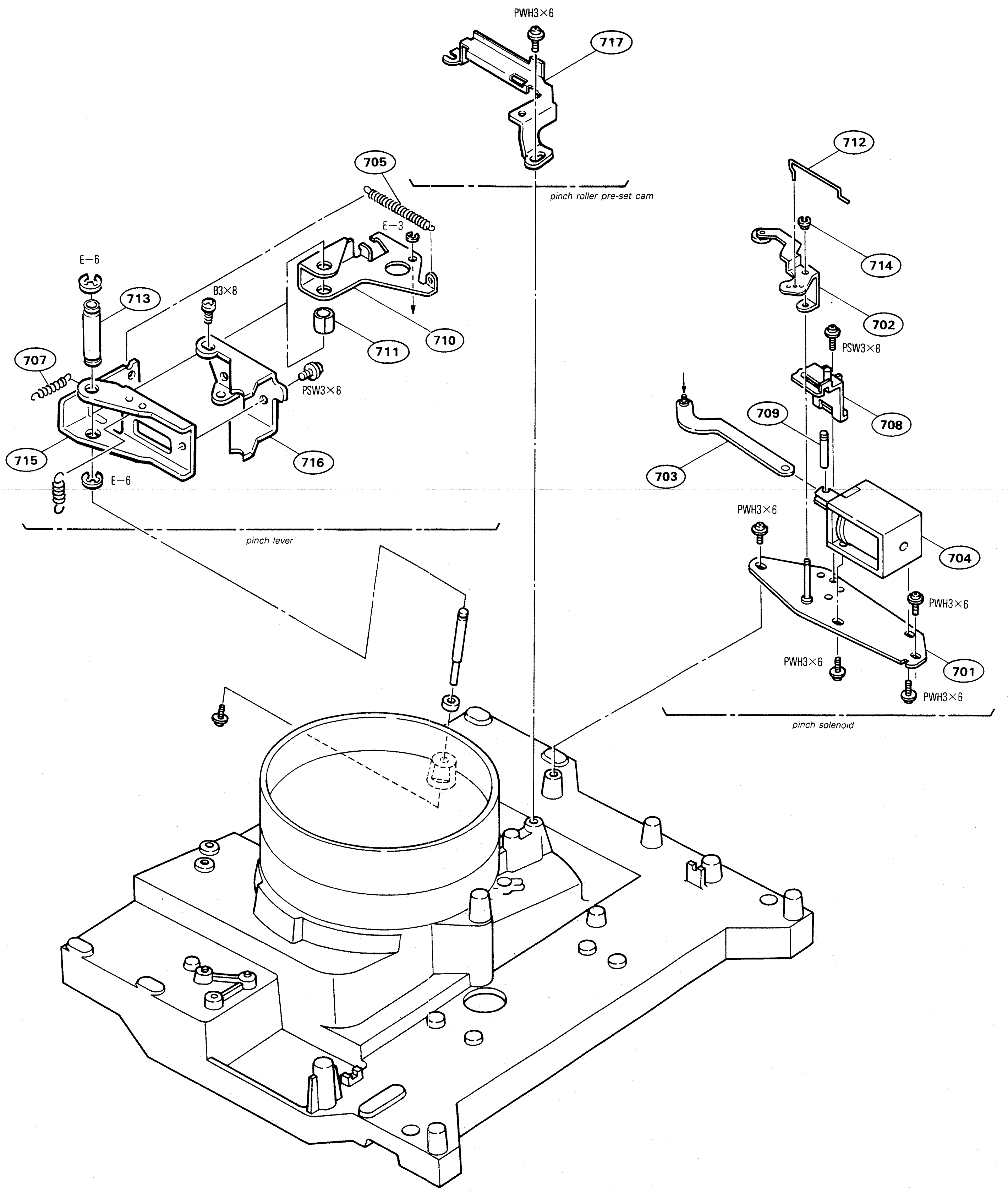
ERASE HEAD BASE


B3×25
609
608
603
628
SET SCREW3×12 (CORN POINT)
SET SCREW3×12 (CORN POINT)
612
PSW3×6
624
PWH3×6
604
607
PSW3×6
605
618
PWH3×6
621
B3×20
627
PS2.6×4
608
SET SCREW3×6 (FLAT POINT)
SET SCREW3×6 (FLAT POINT)
611
602
615
622
PWH3×6
SET SCREW3×12 (CORN POINT)
625
PSW3×8
602
B2.6×4
616
614
S guard
619
613
601
610
606
E-2.3
608
609
B3×25
623
617
PWH3×6
620
E-2.3
erase head base

No.	Part No.	SP	Description
601	X-3668-728-0	o	DECK ASS'Y, E HEAD
602	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5
603	1-622-223-11	o	PRINTED CIRCUIT BOARD, EC-28
604	1-622-261-11	o	PRINTED CIRCUIT BOARD, DUS-147
605	3-534-238-XX	s	SPRING, TENSION (23T)
606	3-535-531-00	s	SPRING, TENSION
607	3-538-102-00	s	SPRING, TENSION
608	3-637-335-00	s	SPRING, COMPRESSION (C)
609	3-657-086-00	o	SPACER (3x20)
610	3-668-705-00	s	HOLDER (LOWER), S
611	3-668-706-02	s	HOLDER (UPPER), S
612	3-668-707-00	o	TABLE, HEAD, E
613	3-668-708-00	o	ARM, DRIVING, CORRECTION GUIDE
614	3-668-809-02	o	BRACKET, HOLDER
615	3-668-832-02	o	HOLDER (S)
616	3-668-837-00	o	HOLDER, LED
617	3-668-859-00	o	STOPPER, RING
618	3-668-860-00	o	HOOK, SPRING, TENSION REGULATOR
619	3-668-884-03	o	JOINT, RESERVE PRESS
620	3-668-894-00	o	LEVER, RELEASE
621	3-668-962-00	o	BRACKET, AH PC BOARD
622	3-669-920-00	o	COVER, S PHOTO
623	3-669-963-00	o	SPRING, LEAF, GROUND
624	3-669-964-00	o	PLATE, GROUND
625	3-672-764-03	s	GUARD, S
627	4-855-006-11	s	SPACER (3x14)
628	8-825-513-20	s	HEAD, CTL ERASE (EPP170-58)

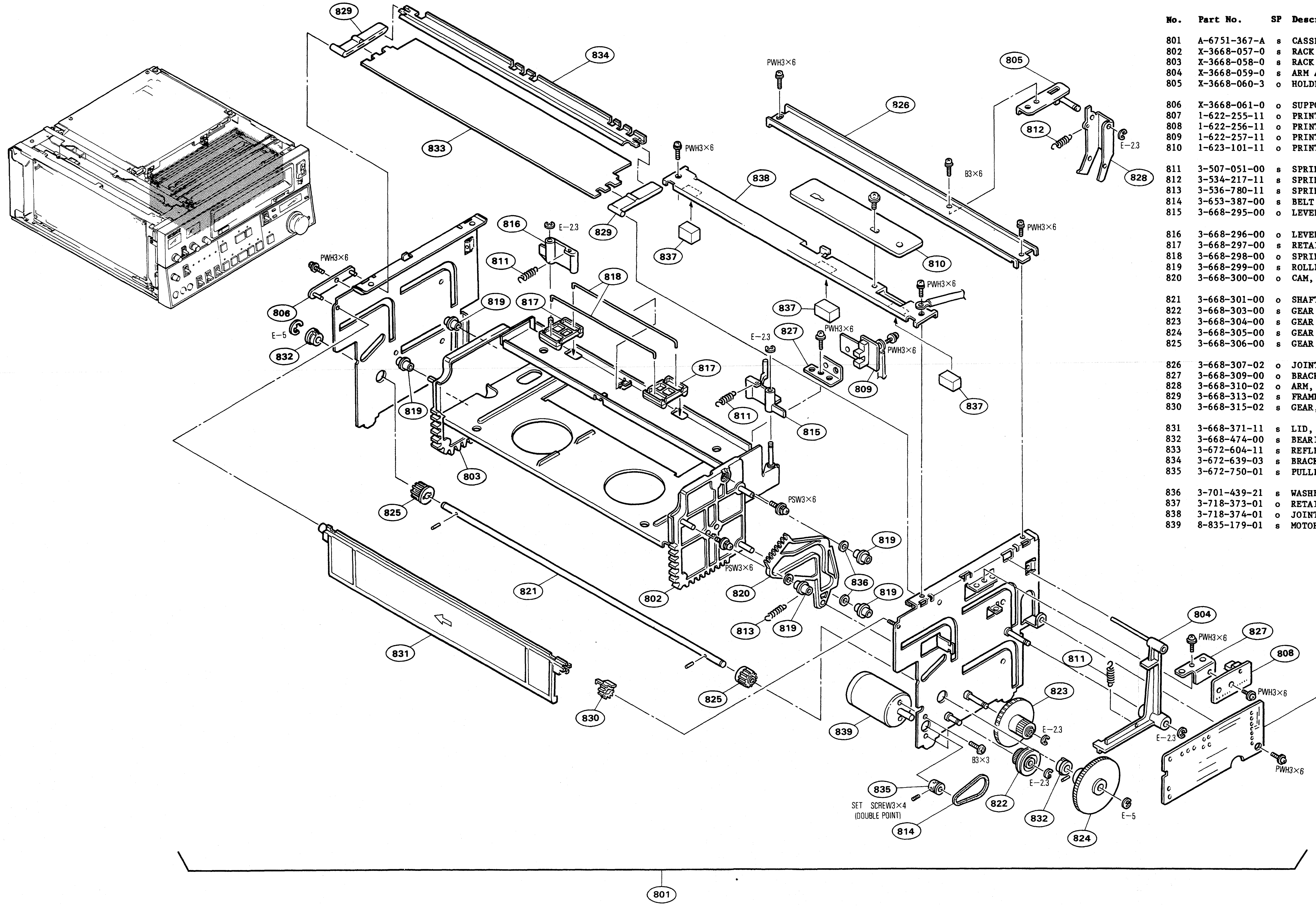
PINCH LEVER AND PINCH SOLENOID BLOCKS




PWH3×6
717
pinch roller pre-set cam
705
E-3
710
711
PSW3×8
B3×8
E-6
713
707
715
716
E-6
pinch lever
712
714
702
PSW3×8
708
709
703
PWH3×6
704
PWH3×6
701
PWH3×6
PWH3×6
pinch solenoid

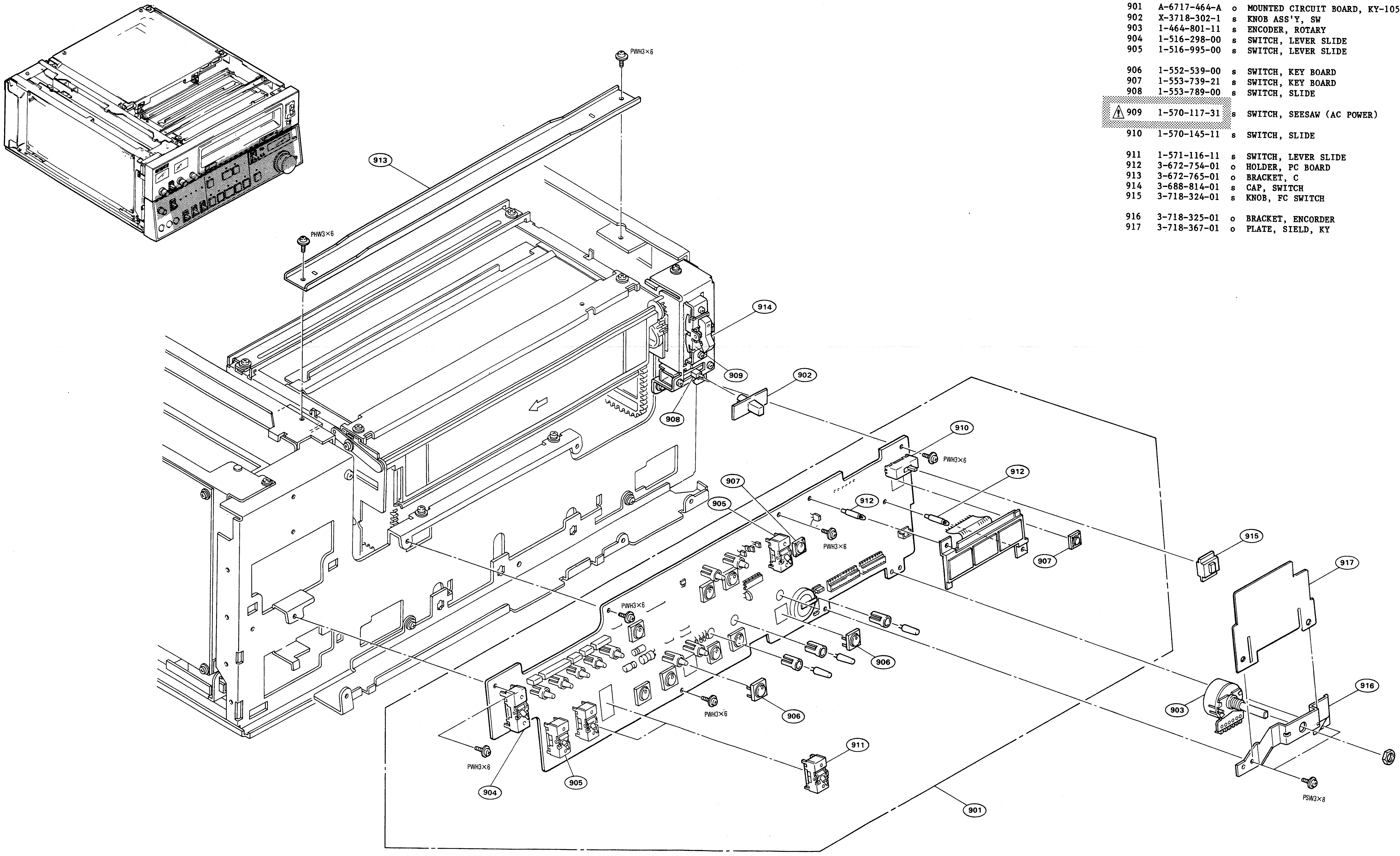
No.	Part No.	SP	Description
701	X-3668-734-0	o	BASE ASS'Y, PINCH PRESS
702	X-3668-735-3	s	LEVER ASS'Y, RESERVE PRESS
703	X-3668-736-0	o	JOINT ASS'Y
704	1-454-416-31	s	SOLENOID, PLUNGER
705	3-610-265-02	s	SPRING
707	3-645-392-00	s	SPRING, TENSION
708	3-668-863-00	s	GUIDE, ARBOR
709	3-668-864-00	s	PIN, SOLENOID
710	3-668-865-00	o	LEVER (B), PINCH PRESS
711	3-668-867-00	o	SPACER (8x9)
712	3-668-884-03	o	JOINT, RESERVE PRESS
713	3-668-896-00	o	SLEEVE, PRESS LEVER, PINCH
714	3-703-074-00	s	CAP 3, SHAFT
715	3-718-364-01	o	LEVER (A), PINCH PRESS
716	3-718-365-01	o	PLATE, PRESS, PINCH
717	3-718-727-01	o	DECK, RESERVE PRESS

CASSETTE-UP COMPARTMENT BLOCK


829
834
833
829
806
E-5
832
PWH3×6
816
E-2.3
811
818
819
817
817
819
803
825
821
831
830
825
802
PSW3×6
PSW3×6
820
819
836
819
813
819
PWH3×6
838
837
837
PWH3×6
826
B3×6
810
805
812
E-2.3
828
PWH3×6
PWH3×6
E-2.3
827
PWH3×6
PWH3×6
809
815
811
837
804
PWH3×6
827
808
PWH3×6
807
811
E-2.3
823
E-2.3
839
B3×3
835
SET SCREW3×4
(DOUBLE POINT)
814
822
E-2.3
832
824
E-5
PWH3×6
801

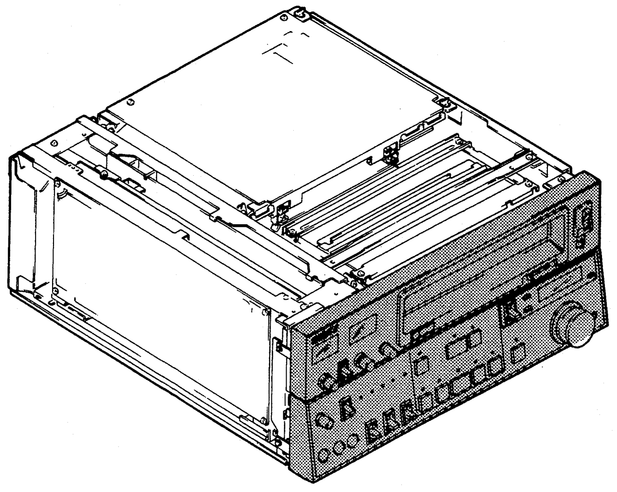
No.	Part No.	SP	Description
801	A-6751-367-A	s	CASSETTE-UP BLOCK ASS'Y
802	X-3668-057-0	s	RACK ASS'Y, CASSETTE COMPARTMENT
803	X-3668-058-0	s	RACK ASS'Y, CASSETTE COMPARTMENT
804	X-3668-059-0	s	ARM ASS'Y, SWITCH, DOWN
805	X-3668-060-3	o	HOLDER ASS'Y, ARM
806	X-3668-061-0	o	SUPPORT ASS'Y, LID
807	1-622-255-11	o	PRINTED CIRCUIT BOARD, CC-31
808	1-622-256-11	o	PRINTED CIRCUIT BOARD, CC-32
809	1-622-257-11	o	PRINTED CIRCUIT BOARD, CC-33
810	1-623-101-11	o	PRINTED CIRCUIT BOARD, LP-41
811	3-507-051-00	s	SPRING, TENSION
812	3-534-217-11	s	SPRING, TENSION
813	3-536-780-11	s	SPRING, TENSION
814	3-653-387-00	s	BELT, LM
815	3-668-295-00	o	LEVER (RIGHT), CASSETTE PUSH-OUT
816	3-668-296-00	o	LEVER (LEFT), CASSETTE PUSH-OUT
817	3-668-297-00	s	RETAINER, CASSETTE
818	3-668-298-00	o	SPRING
819	3-668-299-00	s	ROLLER, GUIDE
820	3-668-300-00	o	CAM, LID OPEN
821	3-668-301-00	o	SHAFT, DRIVING
822	3-668-303-00	s	GEAR (A)
823	3-668-304-00	s	GEAR (B)
824	3-668-305-00	s	GEAR (C)
825	3-668-306-00	s	GEAR (D)
826	3-668-307-02	o	JOINT (R), LEFT & RIGHT
827	3-668-309-00	o	BRACKET, SWITCH
828	3-668-310-02	o	ARM, LID OPEN
829	3-668-313-02	s	FRAME, SUPPORT, REFLECTOR
830	3-668-315-02	s	GEAR, LID
831	3-668-371-11	s	LID, CASSETTE
832	3-668-474-00	s	BEARING (6)
833	3-672-604-11	s	REFLECTOR
834	3-672-639-03	s	BRACKET, LAMP
835	3-672-750-01	s	PULLEY (C), MOTOR
836	3-701-439-21	s	WASHER, POLY 3MM DIA., 0.50T
837	3-718-373-01	o	RETAINER, LID
838	3-718-374-01	o	JOINT (F), LEFT & RIGHT
839	8-835-179-01	s	MOTOR, DC MCB2B15

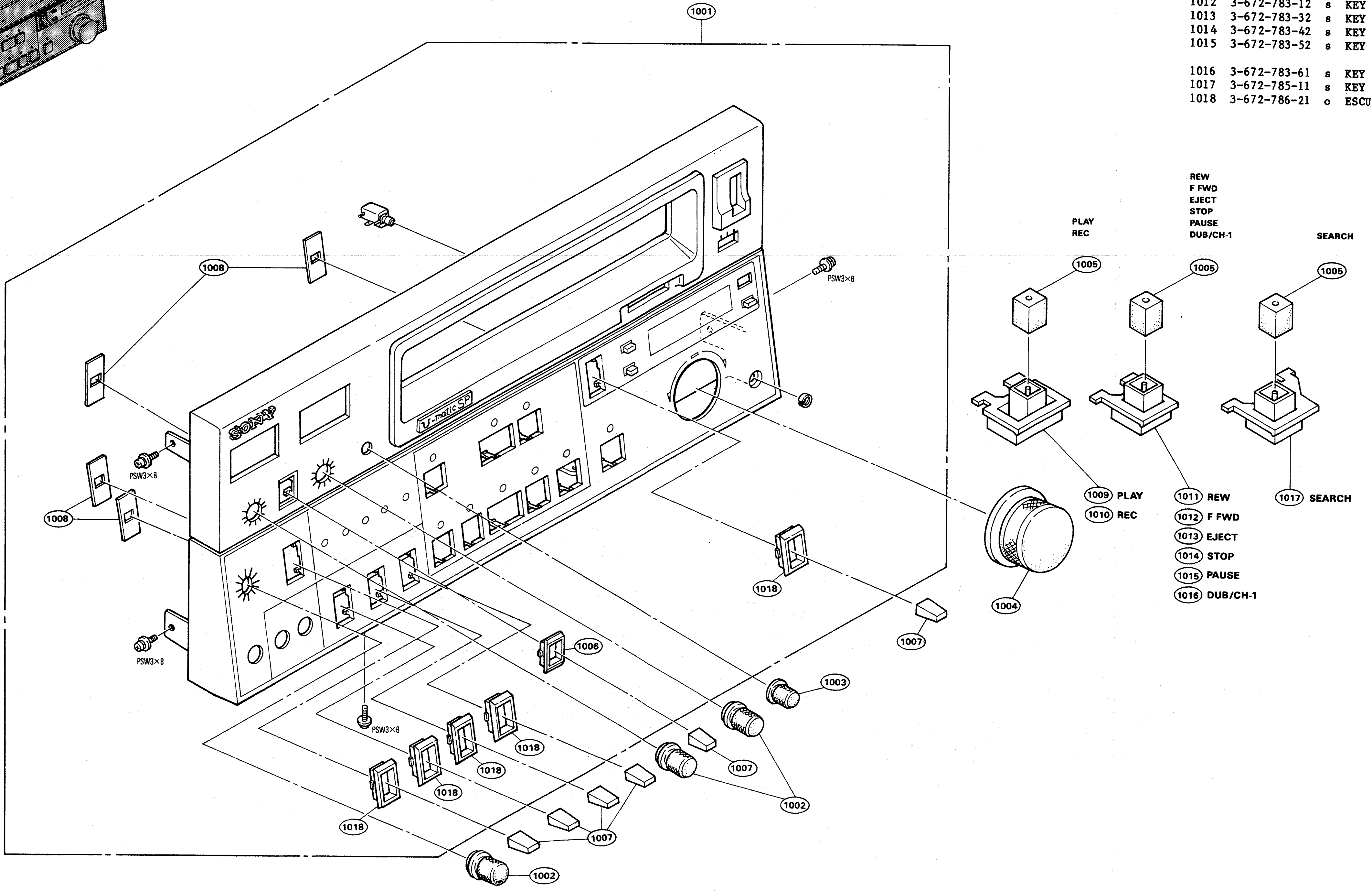
FUNCTION CONTROL


PWH3×6
913
PWH3×6
914
909
902
908
910
PWH3×6
912
907
905
912
PWH3×6
915
907
917
PWH3×6
906
906
PWH3×6
916
903
911
PWH3×6
904
905
901
PSW3×8

No.	Part No.	SP	Description
901	A-6717-464-A	o	MOUNTED CIRCUIT BOARD, KY-105C
902	X-3718-302-1	s	KNOB ASS'Y, SW
903	1-464-801-11	s	ENCODER, ROTARY
904	1-516-298-00	s	SWITCH, LEVER SLIDE
905	1-516-995-00	s	SWITCH, LEVER SLIDE
906	1-552-539-00	s	SWITCH, KEY BOARD
907	1-553-739-21	s	SWITCH, KEY BOARD
908	1-553-789-00	s	SWITCH, SLIDE
⚠ 909	1-570-117-31	s	SWITCH, SEESAW (AC POWER)
910	1-570-145-11	s	SWITCH, SLIDE
911	1-571-116-11	s	SWITCH, LEVER SLIDE
912	3-672-754-01	o	HOLDER, PC BOARD
913	3-672-765-01	o	BRACKET, C
914	3-688-814-01	s	CAP, SWITCH
915	3-718-324-01	s	KNOB, FC SWITCH
916	3-718-325-01	o	BRACKET, ENCORDER
917	3-718-367-01	o	PLATE, SIELD, KY

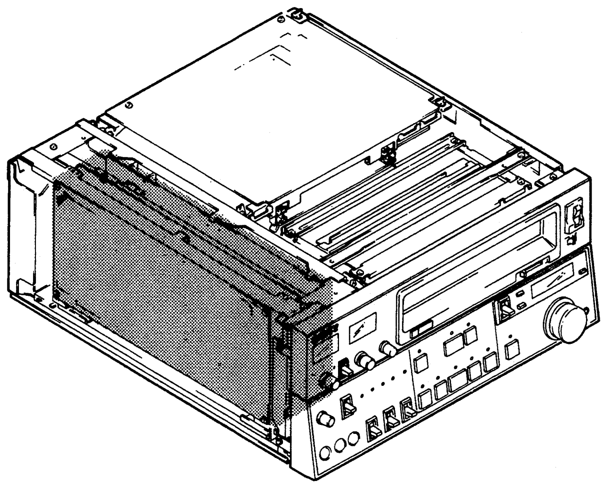
FRONT PANEL BLOCK

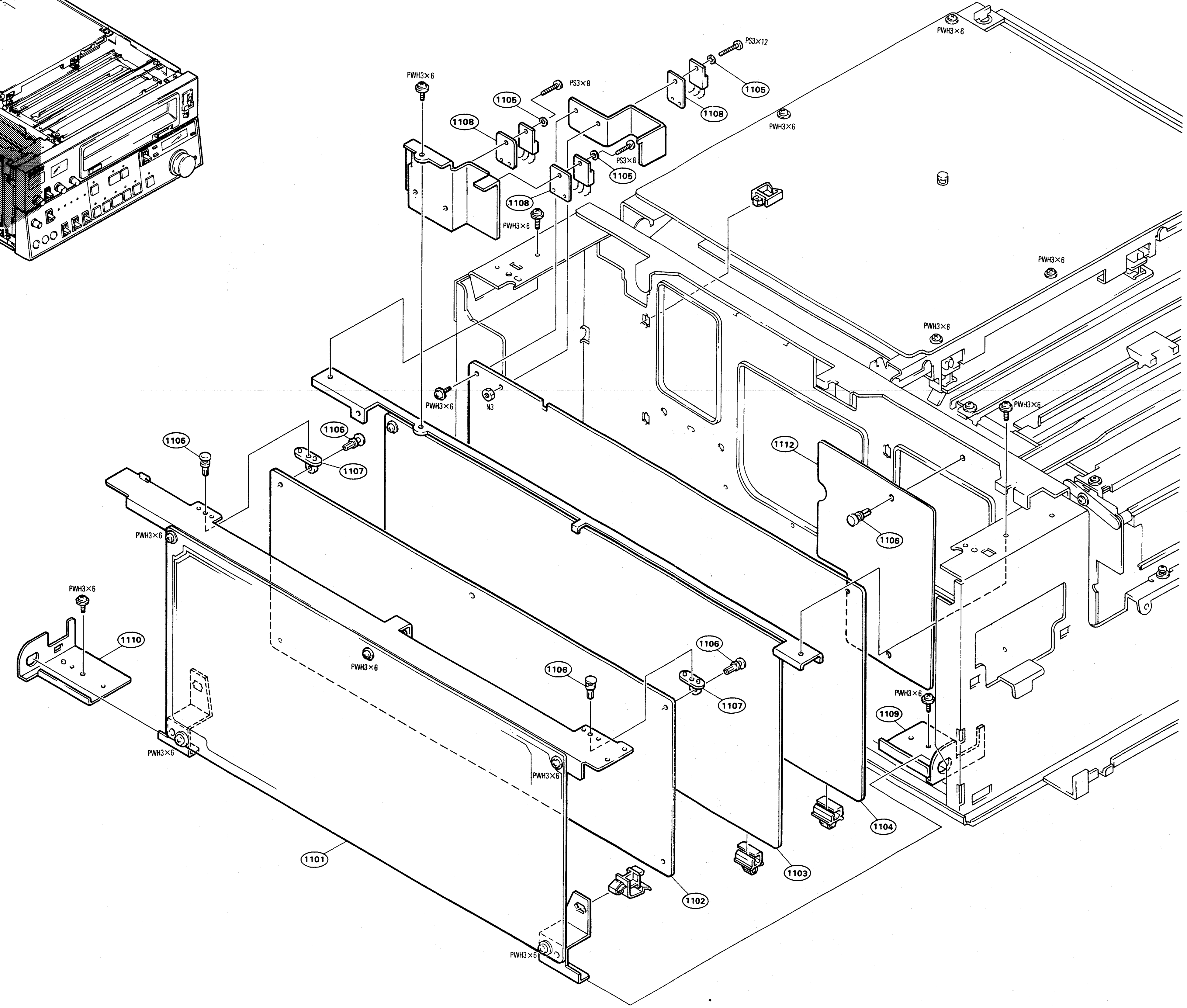



1001
1008
1008
PSW3×8
PSW3×8
PSW3×8
PSW3×8
1006
1018
1018
1018
1018
1018
1018
1007
1007
1007
1003
1002
1002
1002
1004
PLAY
REC
REW
F FWD
EJECT
STOP
PAUSE
DUB/CH-1
SEARCH
1005
1005
1005
1009 PLAY
1010 REC
1011 REW
1012 F FWD
1013 EJECT
1014 STOP
1015 PAUSE
1016 DUB/CH-1
1017 SEARCH

No.	Part No.	SP	Description
1001	A-6704-277-A	o	PANEL ASS'Y, FRONT
1002	X-2112-801-1	s	KNOB ASS'Y, VOL
1003	X-3672-707-1	s	KNOB ASS'Y, VOLUME
1004	X-3718-304-1	s	KNOB ASS'Y, DIAL
1005	2-284-744-00	o	CUSHION (B), KEY
1006	3-668-016-21	o	FRAME (SMALL), ORNAMENTAL
1007	3-668-028-21	s	KNOB (SMALL), LEVER SWITCH
1008	3-669-909-31	o	PLATE, BLIND, LEVER SWITCH
1009	3-672-782-02	s	KEY TOP (A) "PLAY"
1010	3-672-782-11		KEY TOP (A) "REC"
1011	3-672-783-02	s	KEY TOP (B) "REW"
1012	3-672-783-12	s	KEY TOP (B) "F FWD"
1013	3-672-783-32	s	KEY TOP (B) "EJECT"
1014	3-672-783-42	s	KEY TOP (B) "STOP"
1015	3-672-783-52	s	KEY TOP (B) "PAUSE"
1016	3-672-783-61	s	KEY TOP (B) "DUB/CH-1"
1017	3-672-785-11	s	KEY TOP (D) "SEARCH"
1018	3-672-786-21	o	ESCUTCHEON (INNER), SLIDE SW

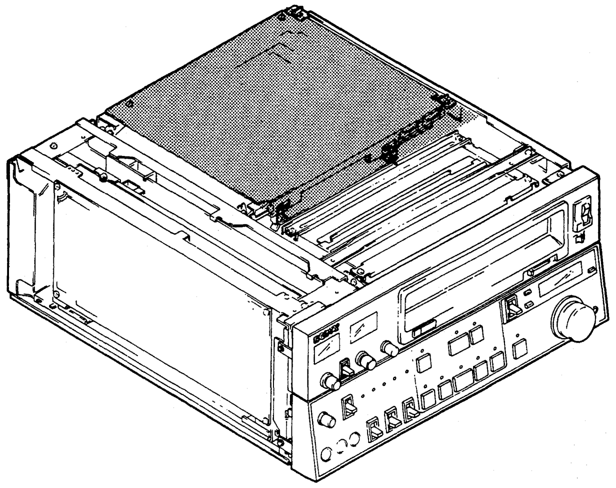
CHASSIS BLOCK (1), LEFT SIDE

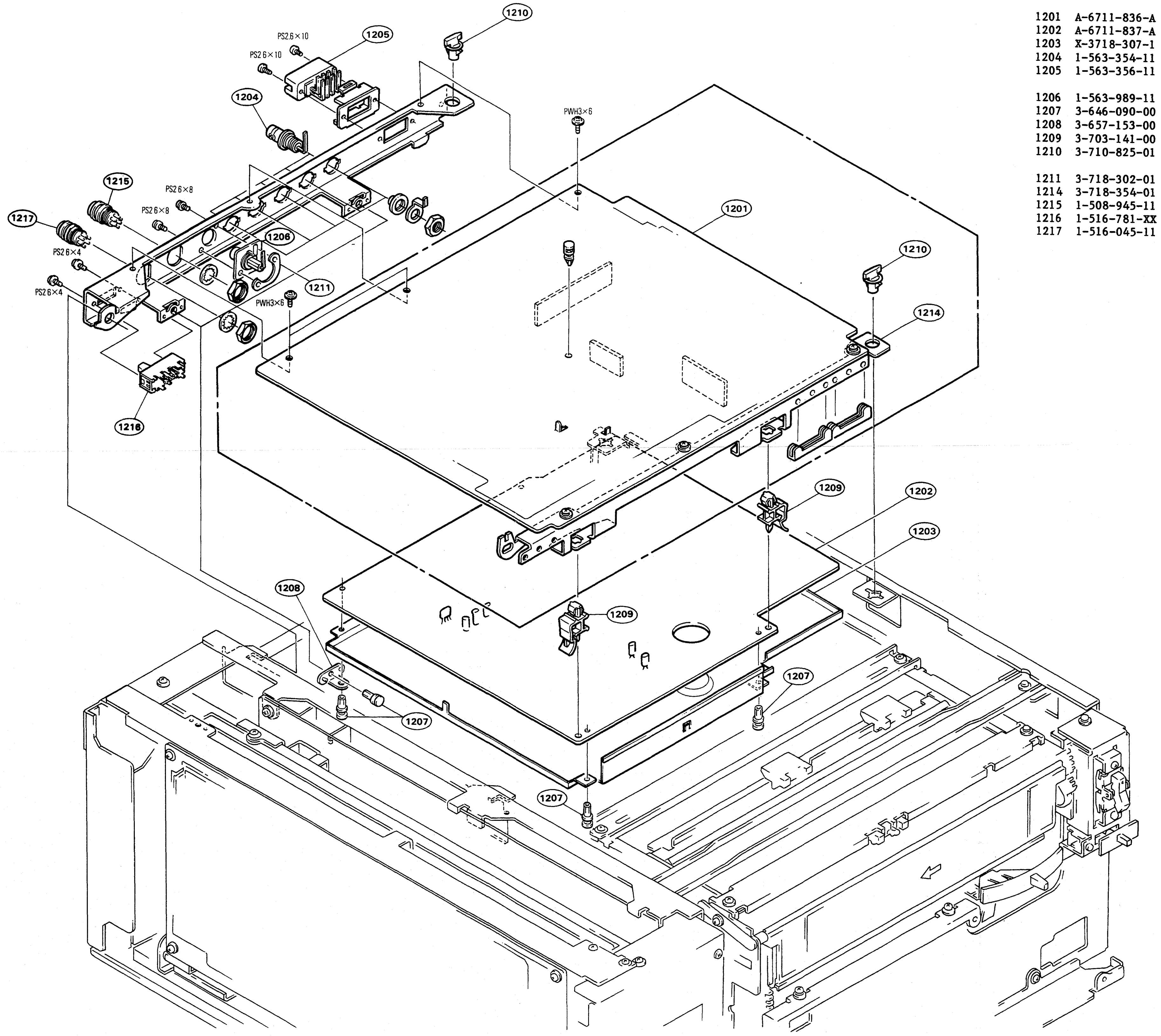



PWH3×6
1105
PS3×8
1108
PS3×12
1105
1108
PWH3×6
PS3×8
1105
1108
PWH3×6
PWH3×6
PWH3×6
PWH3×6
N3
PWH3×6
1106
1106
1107
1112
1106
PWH3×6
PWH3×6
1110
PWH3×6
1106
1106
1107
PWH3×6
1109
PWH3×6
PWH3×6
1104
1101
1103
1102
PWH3×6

No.	Part No.	SP	Description
1101	A-6713-277-A	o	MOUNTED CIRCUIT BOARD, AU-82
1102	A-6713-278-A	o	MOUNTED CIRCUIT BOARD, AU-89
1103	A-6715-374-A	o	MOUNTED CIRCUIT BOARD, SV-93C
1104	A-6717-448-A	o	MOUNTED CIRCUIT BOARD, SY-106
1105	2-371-561-00	s	BUSHING (P), INSULATING
1106	3-646-090-00	s	RIVET, NYLON
1107	3-657-153-00	o	HINGE
1108	3-703-037-00	s	INSULATOR, TO-220
1109	3-718-303-01	o	PLATE (A), HINGE, AU
1110	3-718-304-01	o	PLATE (B), HINGE, AU
1112	3-718-370-01	o	INSULATOR, SY

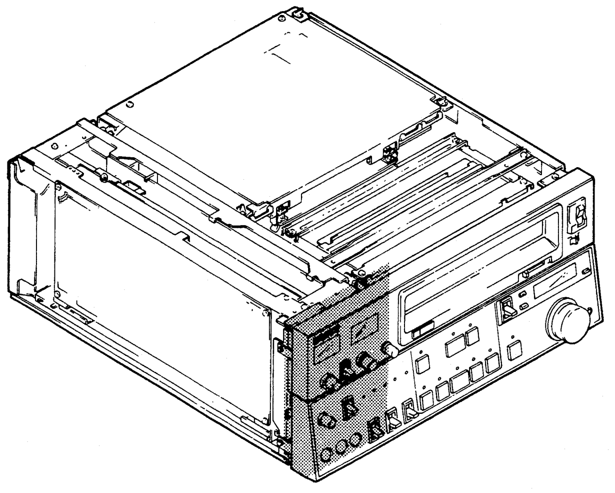
CHASSIS BLOCK (2), BACK SIDE

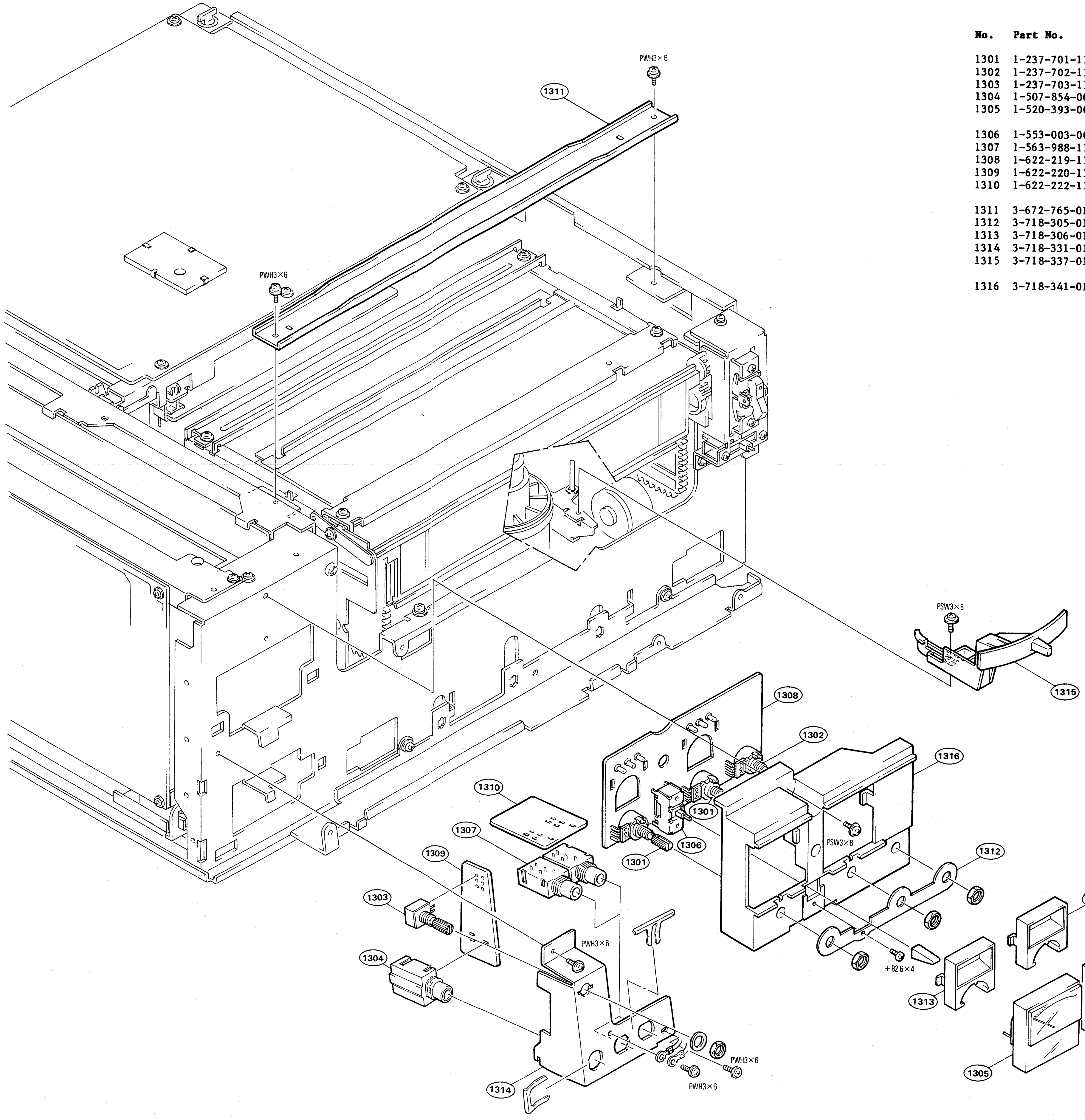



1210
PS2.6×10
1205
PS2.6×10
1204
PWH3×6
1215
PS2.6×8
PS2.6×8
1217
PS2.6×4
1206
PS2.6×4
1211
PWH3×6
1216
1201
1210
1214
1209
1202
1203
1208
1209
1207
1207
1207

No.	Part No.	SP	Description
1201	A-6711-836-A	o	MOUNTED CIRCUIT BOARD, VO-17
1202	A-6711-837-A	o	MOUNTED CIRCUIT BOARD, CO-7
1203	X-3718-307-1	o	PLATE BLOCK ASS'Y, SHIELD, VR
1204	1-563-354-11	s	CONNECTOR, BNC
1205	1-563-356-11	s	CONNECTOR, MULTI 8P
1206	1-563-989-11	s	JACK, PIN (RCA) 1P
1207	3-646-090-00	s	RIVET, NYLON
1208	3-657-153-00	o	HINGE
1209	3-703-141-00	o	HOLDER, PCB
1210	3-710-825-01	o	FASTENER, PLATE
1211	3-718-302-01	o	BRACKET, PIN JACK
1214	3-718-354-01	o	BRACKET, VR
1215	1-508-945-11	o	CONNECTOR, (R-M)
1216	1-516-781-XX	s	SLIDE SWITCH
1217	1-516-045-11	s	CONNECTOR, (R-F)

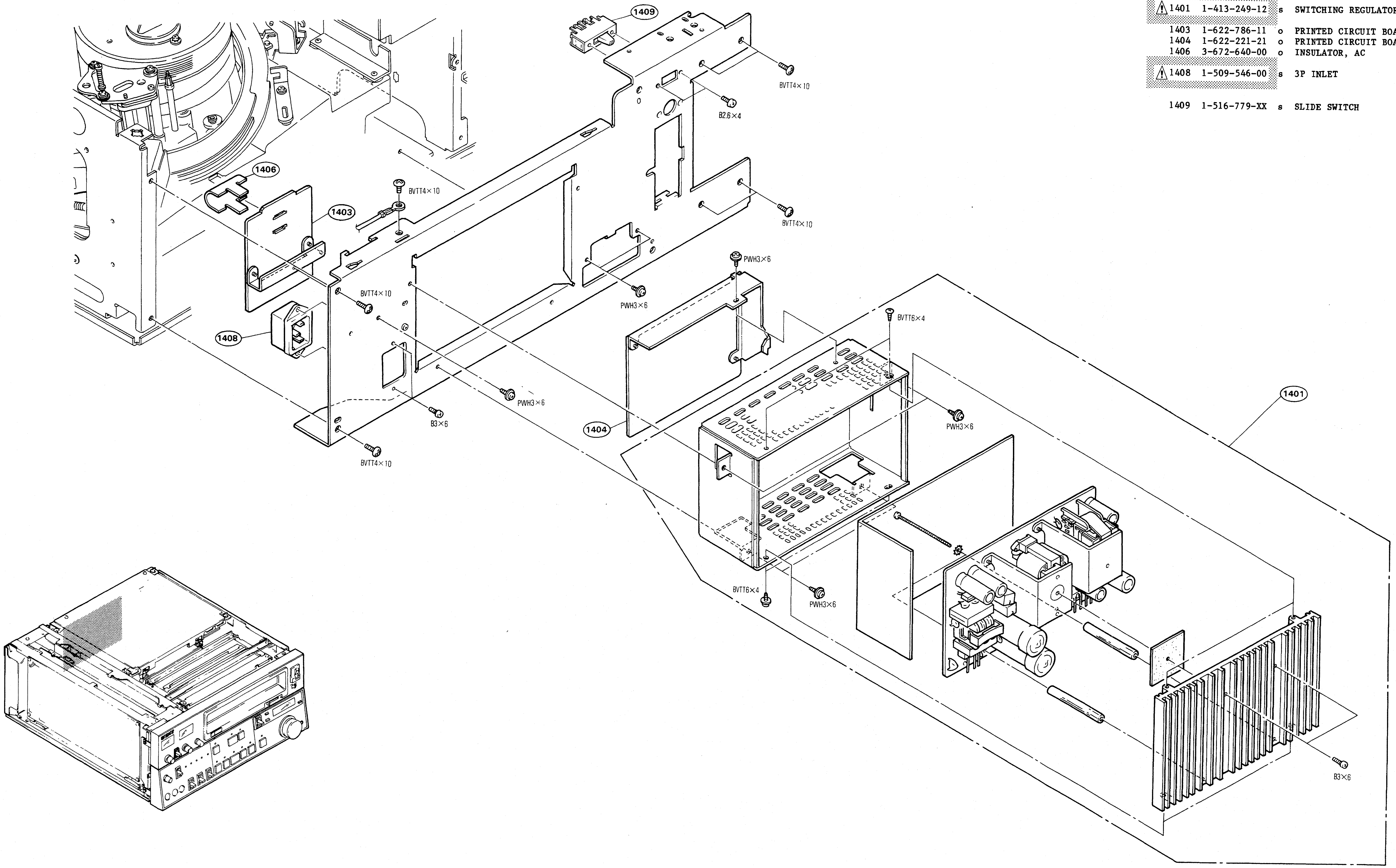
LEVEL CONTROL PANEL




PWH3×6
1311
PWH3×6
PSW3×8
1315
1308
1302
1316
1310
1301
1307
1306
1301
PSW3×8
1312
1309
1303
1313
1305
PWH3×6
+B26×4
1304
1313
PWH3×6
1305
1314
PWH3×6

No.	Part No.	SP	Description
1301	1-237-701-11	s	RES, VAR CARBON 5K
1302	1-237-702-11	s	RES, VAR CARBON 100K
1303	1-237-703-11	s	RES, VAR CARBON 2K/2K
1304	1-507-854-00	s	JACK, LARGE TYPE
1305	1-520-393-00	s	METER, AUDIO
1306	1-553-003-00	s	SWITCH, LEVER SLIDE
1307	1-563-988-11	s	JACK, LARGE TYPE 2P
1308	1-622-219-11	o	PRINTED CIRCUIT BOARD, MT-29
1309	1-622-220-11	o	PRINTED CIRCUIT BOARD, HP-30
1310	1-622-222-11	o	PRINTED CIRCUIT BOARD, MC-28
1311	3-672-765-01	o	BRACKET, C
1312	3-718-305-01	o	PLATE (MT), GROUND
1313	3-718-306-01	o	HOLDER, LED
1314	3-718-331-01	o	BRACKET, HEAD PHONE
1315	3-718-337-01	s	LEVER, SKEW
1316	3-718-341-01	o	PANEL, METER

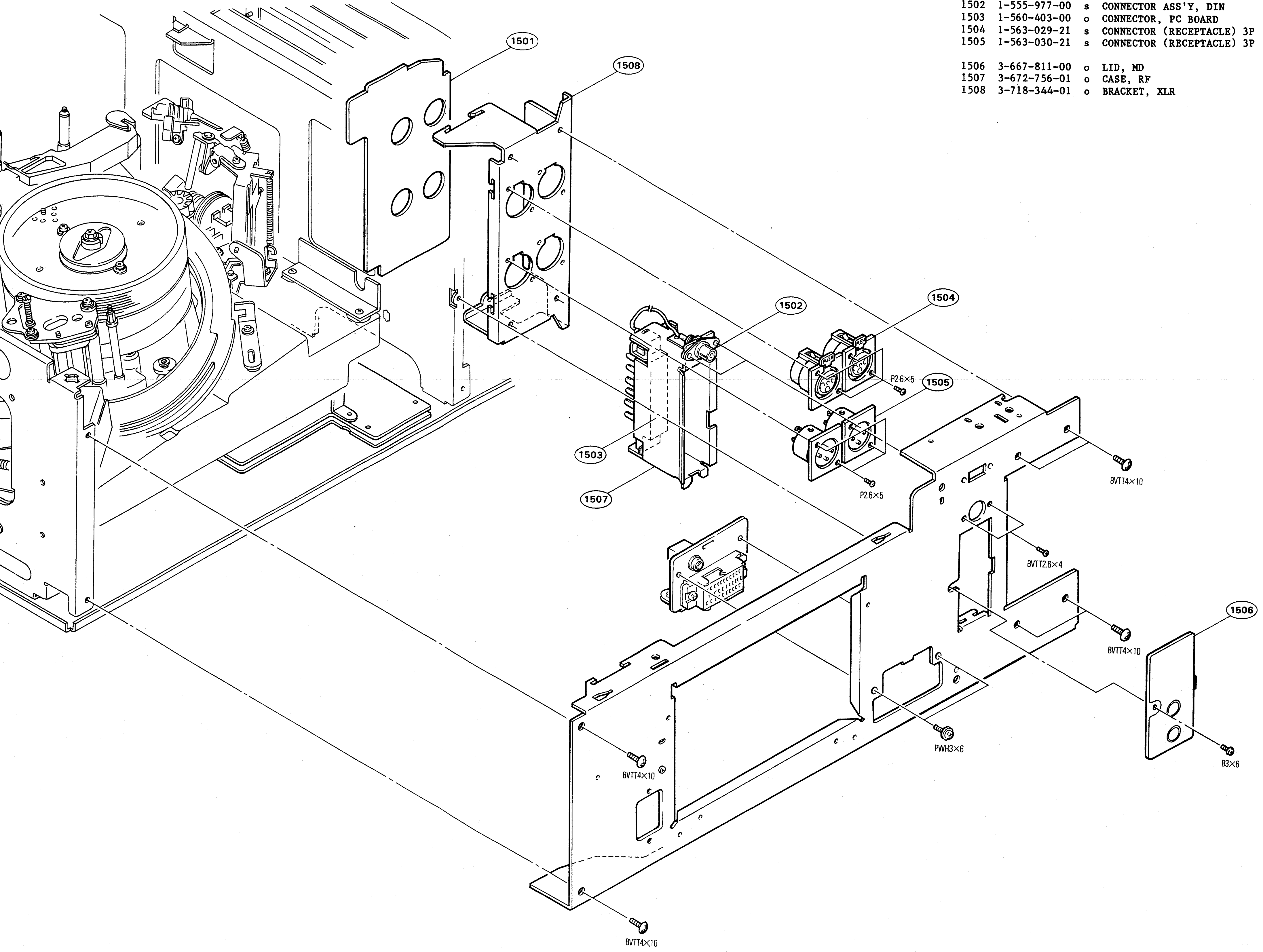
SWITCHING REGULATOR

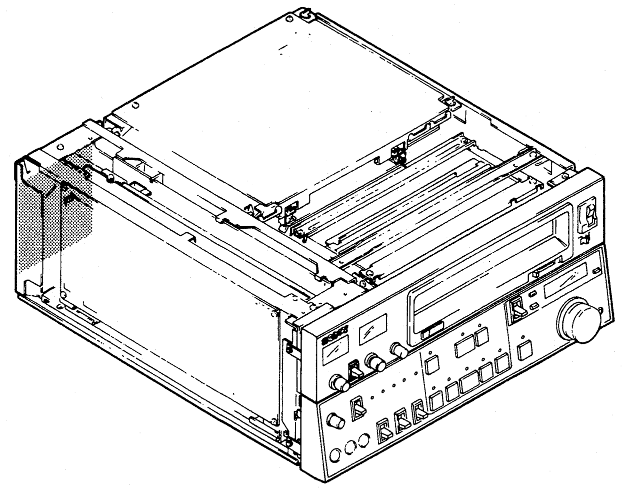

1409
BVTT4×10
B2.6×4
1406
BVTT4×10
1403
BVTT4×10
PWH3×6
PWH3×6
1408
BVTT4×10
PWH3×6
BVTT6×4
B3×6
PWH3×6
1401
1404
BVTT4×10
BVTT6×4
PWH3×6
B3×6

No.	Part No.	SP	Description
⚠1401	1-413-249-12	s	SWITCHING REGULATOR (UR-14E)
1403	1-622-786-11	o	PRINTED CIRCUIT BOARD, AC-89
1404	1-622-221-21	o	PRINTED CIRCUIT BOARD, DC-31A
1406	3-672-640-00	o	INSULATOR, AC
⚠1408	1-509-546-00	s	3P INLET
1409	1-516-779-XX	s	SLIDE SWITCH

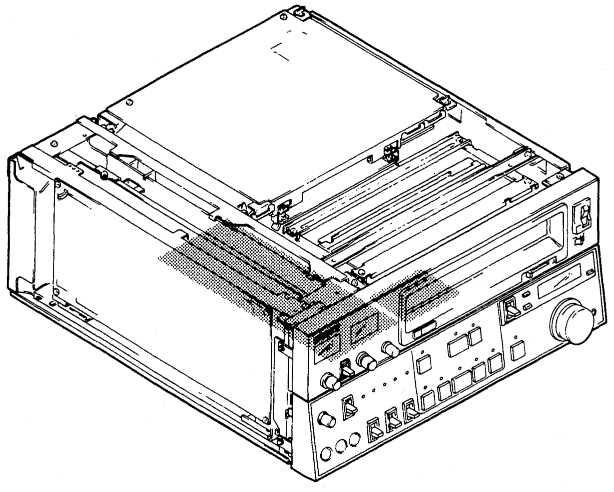
CONNECTOR PANEL

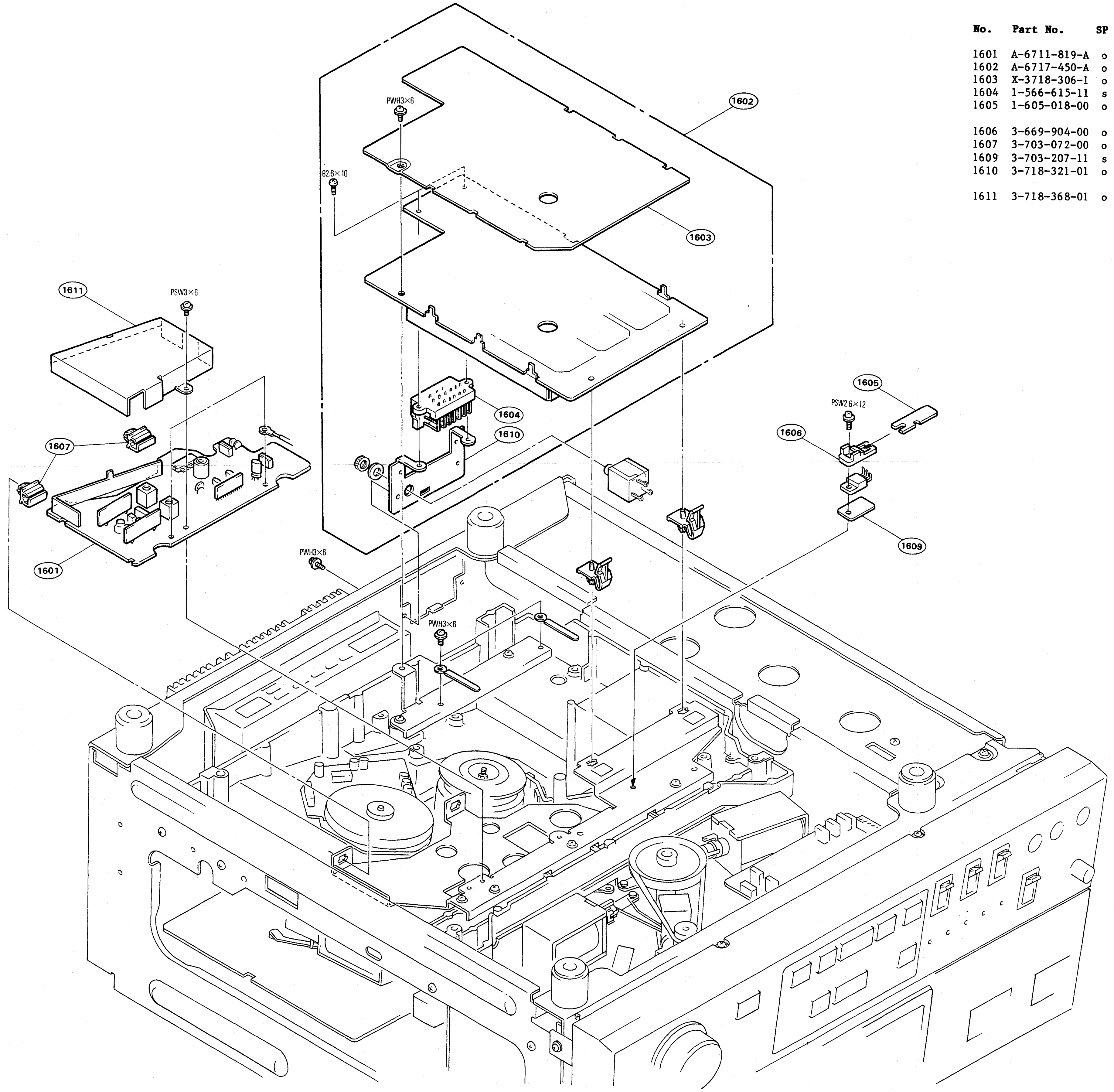
No.	Part No.	SP	Description
1501	A-6713-279-A	o	MOUNTED CIRCUIT BOARD, CP-112
1502	1-555-977-00	s	CONNECTOR ASS'Y, DIN
1503	1-560-403-00	o	CONNECTOR, PC BOARD
1504	1-563-029-21	s	CONNECTOR (RECEPTACLE) 3P
1505	1-563-030-21	s	CONNECTOR (RECEPTACLE) 3P
1506	3-667-811-00	o	LID, MD
1507	3-672-756-01	o	CASE, RF
1508	3-718-344-01	o	BRACKET, XLR


1501
1508
1502
1504
P2.6×5
1505
1503
1507
P2.6×5
BVTT4×10
BVTT2.6×4
BVTT4×10
1506
PWH3×6
B3×6
BVTT4×10
BVTT4×10



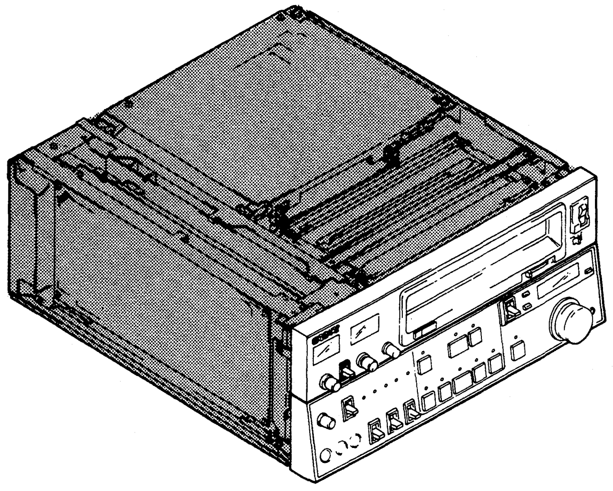
CHASSIS BLOCK (3), BOTTOM

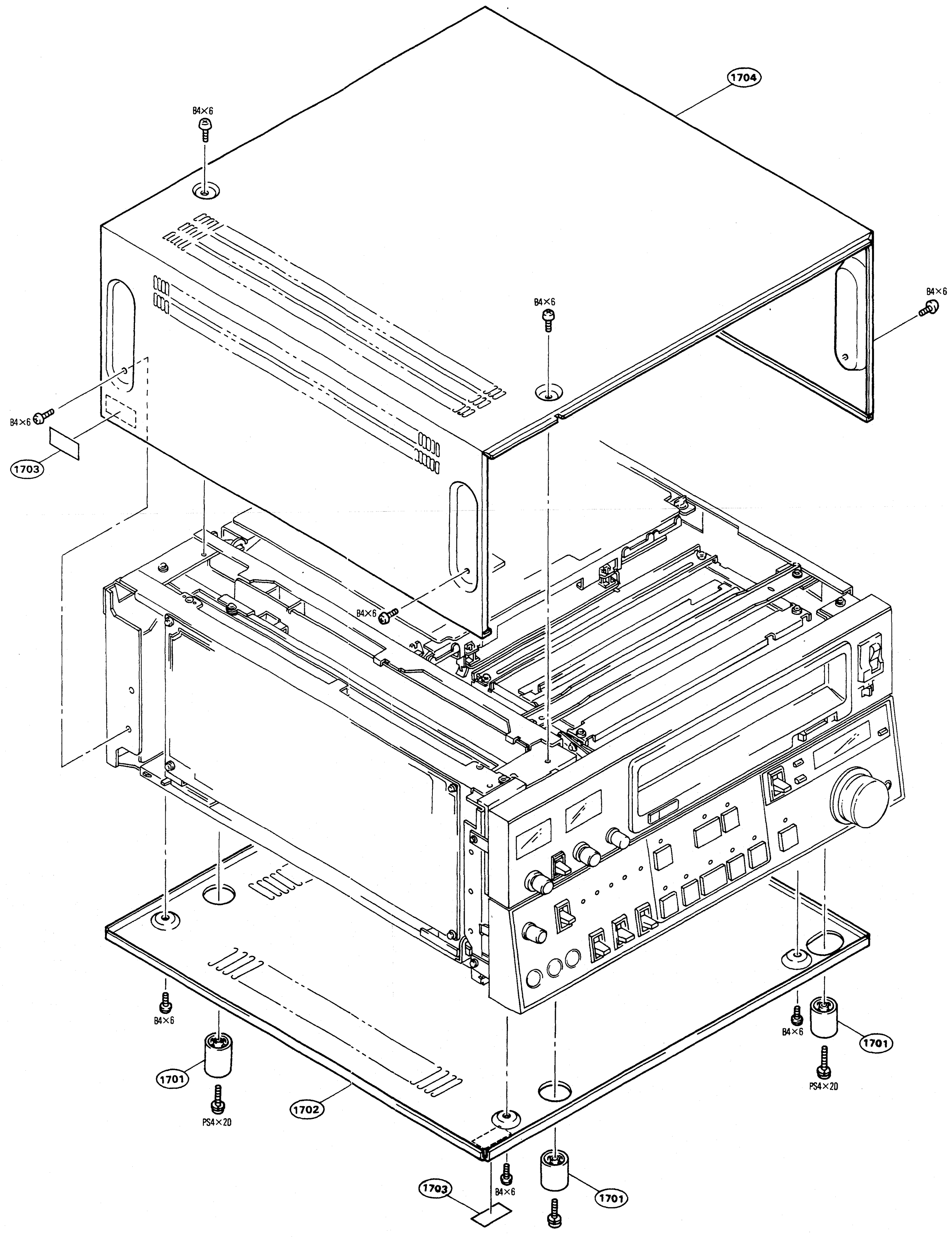



1602
PWH3×6
B2.6×10
1603
1611
PSW3×6
1607
1601
1604
1610
PWH3×6
PWH3×6
1605
PSW2 6×12
1606
1609

No.	Part No.	SP	Description
1601	A-6711-819-A	o	MOUNTED CIRCUIT BOARD, RP-31
1602	A-6717-450-A	o	MOUNTED CIRCUIT BOARD, IF-132
1603	X-3718-306-1	o	PLATE BLOCK ASS'Y, SHIELD IF
1604	1-566-615-11	s	CONNECTOR, SQUARE 33P
1605	1-605-018-00	o	PRINTED CIRCUIT BOARD, PT-9
1606	3-669-904-00	o	HOLDER, PT
1607	3-703-072-00	o	HOLDER, PCB
1609	3-703-207-11	s	INSULATOR, TO-220
1610	3-718-321-01	o	BRACKET, CONNECTOR
1611	3-718-368-01	o	PLATE (UPPER), SHIELD, RP

ORNAMENTAL PANEL BLOCK




1704
B4×6
B4×6
B4×6
B4×6
1703
B4×6
B4×6
1701
PS4×20
1702
B4×6
1701
PS4×20
1703
B4×6
1701

No.	Part No.	SP	Description
1701	3-642-656-01	s	LEG
1702	3-672-766-01	o	BOARD, BOTTOM
1703	3-703-079-31	o	LABEL, CAUTION (BACK)
1704	3-718-347-01	o	CASE, U

15-3. ELECTRICAL PARTS LIST

General Purpose Electrical Parts List

Parts that are not listed in the "reference numbers order list" are shown in following list.
Reference numbers are omitted.

CAPACITOR

.MYLAR

Part No.	SP	Description
1-130-467-00	s	CAP, MYLAR 470pF 5% 50V
1-130-468-00	s	CAP, MYLAR 560pF 5% 50V
1-130-469-00	s	CAP, MYLAR 680pF 5% 50V
1-130-470-00	s	CAP, MYLAR 820pF 5% 50V
1-130-471-00	s	CAP, MYLAR 1000pF 5% 50V
1-130-472-00	s	CAP, MYLAR 1200pF 5% 50V
1-130-473-00	s	CAP, MYLAR 1500pF 5% 50V
1-130-474-00	s	CAP, MYLAR 1800pF 5% 50V
1-130-475-00	s	CAP, MYLAR 2200pF 5% 50V
1-130-476-00	s	CAP, MYLAR 2700pF 5% 50V
1-130-477-00	s	CAP, MYLAR 3300pF 5% 50V
1-130-478-00	s	CAP, MYLAR 3900pF 5% 50V
1-130-479-00	s	CAP, MYLAR 4700pF 5% 50V
1-130-480-00	s	CAP, MYLAR 5600pF 5% 50V
1-130-481-00	s	CAP, MYLAR 6800pF 5% 50V
1-130-482-00	s	CAP, MYLAR 8200pF 5% 50V
1-130-483-00	s	CAP, MYLAR 0.01 5% 50V
1-130-484-00	s	CAP, MYLAR 0.012 5% 50V
1-130-485-00	s	CAP, MYLAR 0.015 5% 50V
1-130-486-00	s	CAP, MYLAR 0.018 5% 50V
1-130-487-00	s	CAP, MYLAR 0.022 5% 50V
1-130-488-00	s	CAP, MYLAR 0.027 5% 50V
1-130-489-00	s	CAP, MYLAR 0.033 5% 50V
1-130-490-11	s	CAP, MYLAR 0.039 5% 50V
1-130-491-00	s	CAP, MYLAR 0.047 5% 50V
1-130-492-11	s	CAP, MYLAR 0.056 5% 50V
1-130-493-00	s	CAP, MYLAR 0.068 5% 50V
1-130-494-11	s	CAP, MYLAR 0.082 5% 50V
1-130-495-00	s	CAP, MYLAR 0.1 5% 50V
1-130-496-00	s	CAP, MYLAR 0.12 5% 50V
1-130-497-00	s	CAP, MYLAR 0.15 5% 50V
1-130-498-00	s	CAP, MYLAR 0.18 5% 50V
1-130-499-00	s	CAP, MYLAR 0.22 5% 50V
1-136-502-11	s	CAP, MYLAR 0.33 5% 50V

.MICA,SILVERED

Part No.	SP	Description
1-107-019-00	s	CAP, MICA 1.0pF ±0.5pF 500V
1-107-039-00	s	CAP, MICA 1.2pF ±0.5pF 500V
1-107-040-00	s	CAP, MICA 1.5pF ±0.5pF 500V
1-107-041-00	s	CAP, MICA 1.8pF ±0.5pF 500V
1-107-042-00	s	CAP, MICA 2.2pF ±0.5pF 500V
1-107-043-00	s	CAP, MICA 2.7pF ±0.5pF 500V
1-107-044-00	s	CAP, MICA 3.3pF ±0.5pF 500V
1-107-045-00	s	CAP, MICA 3.9pF ±0.5pF 500V
1-107-046-00	s	CAP, MICA 4.7pF ±0.5pF 500V
1-107-026-00	s	CAP, MICA 5.1pF ±0.5pF 500V
1-107-047-00	s	CAP, MICA 5.6pF ±0.5pF 500V
1-107-048-00	s	CAP, MICA 6.8pF ±0.5pF 500V
1-107-049-00	s	CAP, MICA 8.2pF ±0.5pF 500V
1-107-202-00	s	CAP, MICA 10pF 5% 500V
1-107-203-00	s	CAP, MICA 11pF 5% 500V
1-107-204-00	s	CAP, MICA 12pF 5% 500V
1-107-205-00	s	CAP, MICA 13pF 5% 500V
1-107-206-00	s	CAP, MICA 15pF 5% 500V
1-107-207-00	s	CAP, MICA 16pF 5% 500V
1-107-208-00	s	CAP, MICA 18pF 5% 500V
1-107-209-00	s	CAP, MICA 20pF 5% 500V
1-107-210-00	s	CAP, MICA 22pF 5% 500V
1-107-211-00	s	CAP, MICA 24pF 5% 500V
1-107-157-00	s	CAP, MICA 27pF 5% 500V
1-107-158-00	s	CAP, MICA 30pF 5% 500V
1-107-159-00	s	CAP, MICA 33pF 5% 500V
1-107-074-00	s	CAP, MICA 36pF 5% 50V
1-107-075-00	s	CAP, MICA 39pF 5% 50V
1-107-076-00	s	CAP, MICA 43pF 5% 50V
1-107-077-00	s	CAP, MICA 47pF 5% 50V
1-107-164-00	s	CAP, MICA 51pF 5% 500V
1-107-165-00	s	CAP, MICA 56pF 5% 500V
1-107-166-00	s	CAP, MICA 62pF 5% 500V
1-107-036-00	s	CAP, MICA 68pF 5% 500V
1-107-167-00	s	CAP, MICA 75pF 5% 500V
1-107-083-00	s	CAP, MICA 82pF 5% 50V
1-107-084-00	s	CAP, MICA 91pF 5% 50V
1-107-085-00	s	CAP, MICA 100pF 5% 50V
1-107-086-00	s	CAP, MICA 110pF 5% 50V
1-107-087-00	s	CAP, MICA 120pF 5% 50V
1-109-538-00	s	CAP, MICA 130pF 5% 100V
1-109-539-00	s	CAP, MICA 150pF 5% 100V
1-107-090-00	s	CAP, MICA 160pF 5% 50V
1-109-540-00	s	CAP, MICA 180pF 5% 100V
1-109-541-00	s	CAP, MICA 200pF 5% 100V
1-109-542-00	s	CAP, MICA 220pF 5% 100V
1-109-545-00	s	CAP, MICA 270pF 5% 100V
1-109-547-00	s	CAP, MICA 330pF 5% 100V
1-109-549-00	s	CAP, MICA 390pF 5% 100V
1-109-633-00	s	CAP, MICA 470pF 2% 500V
1-109-555-00	s	CAP, MICA 560pF 5% 100V
1-109-635-00	s	CAP, MICA 470pF 2% 500V

Part No.	SP	Description
.ELECTROLYTIC		
1-124-902-00	s	CAP, ELECT 0.47 20% 50V
1-124-791-11	s	CAP, ELECT 1.0 20% 100V
1-124-925-11	s	CAP, ELECT 2.2 20% 100V
1-123-382-00	s	CAP, ELECT 3.3 20% 100V
1-124-927-00	s	CAP, ELECT 4.7 20% 100V
1-123-875-91	s	CAP, ELECT 10 20% 50V
1-124-915-11	s	CAP, ELECT 10 20% 63V
1-124-667-11	s	CAP, ELECT 10 20% 100V
1-124-908-11	s	CAP, ELECT 22 20% 50V
1-124-916-11	s	CAP, ELECT 22 20% 63V
1-124-929-11	s	CAP, ELECT 22 20% 100V
1-124-963-11	s	CAP, ELECT 33 20% 16V
1-124-482-11	s	CAP, ELECT 33 20% 35V
1-124-917-11	s	CAP, ELECT 33 20% 63V
1-124-930-11	s	CAP, ELECT 33 20% 100V
1-124-446-11	s	CAP, ELECT 47 20% 10V
1-124-477-11	s	CAP, ELECT 47 20% 25V
1-124-910-11	s	CAP, ELECT 47 20% 50V
1-124-918-11	s	CAP, ELECT 47 20% 63V
1-124-931-11	s	CAP, ELECT 47 20% 100V
1-124-443-00	s	CAP, ELECT 100 20% 10V
1-126-101-11	s	CAP, ELECT 100 20% 16V
1-124-478-11	s	CAP, ELECT 100 20% 25V
1-124-122-11	s	CAP, ELECT 100 20% 50V
1-124-572-11	s	CAP, ELECT 100 20% 63V
1-123-605-00	s	CAP, ELECT 100 20% 100V
1-124-444-00	s	CAP, ELECT 220 20% 10V
1-124-120-11	s	CAP, ELECT 220 20% 25V
1-124-484-11	s	CAP, ELECT 220 20% 35V
1-124-911-11	s	CAP, ELECT 220 20% 50V
1-124-919-51	s	CAP, ELECT 220 20% 63V
1-124-628-11	s	CAP, ELECT 220 20% 100V
1-124-442-00	s	CAP, ELECT 330 20% 6.3V
1-124-604-00	s	CAP, ELECT 330 20% 10V
1-124-119-00	s	CAP, ELECT 330 20% 16V
1-124-479-11	s	CAP, ELECT 330 20% 25V
1-124-485-11	s	CAP, ELECT 330 20% 35V
1-124-912-11	s	CAP, ELECT 330 20% 50V
1-124-472-11	s	CAP, ELECT 470 20% 10V
1-124-475-11	s	CAP, ELECT 470 20% 16V
1-124-480-11	s	CAP, ELECT 470 20% 25V
1-126-104-11	s	CAP, ELECT 470 20% 35V
1-124-913-11	s	CAP, ELECT 470 20% 50V
1-124-921-11	s	CAP, ELECT 470 20% 63V
1-124-471-00	s	CAP, ELECT 1000 20% 6.3V
1-124-473-11	s	CAP, ELECT 1000 20% 10V
1-124-555-00	s	CAP, ELECT 1000 20% 16V
1-124-557-11	s	CAP, ELECT 1000 20% 25V
1-126-105-11	s	CAP, ELECT 1000 20% 35V
1-124-637-11	s	CAP, ELECT 1000 20% 50V
1-124-922-11	s	CAP, ELECT 1000 20% 63V
1-124-893-11	s	CAP, ELECT 2200 20% 10V
1-124-556-11	s	CAP, ELECT 2200 20% 16V
1-124-563-11	s	CAP, ELECT 2200 20% 25V
1-124-618-11	s	CAP, ELECT 2200 20% 35V
1-124-607-11	s	CAP, ELECT 2200 20% 50V
1-124-621-11	s	CAP, ELECT 3300 20% 6.3V
1-124-887-00	s	CAP, ELECT 3300 20% 16V
1-124-636-00	s	CAP, ELECT 3300 20% 25V
1-124-762-00	s	CAP, ELECT 4700 20% 10V
1-124-898-11	s	CAP, ELECT 4700 20% 16V
1-124-564-11	s	CAP, ELECT 4700 20% 25V
1-124-891-11	s	CAP, ELECT 10000 20% 6.3V
1-124-763-00	s	CAP, ELECT 10000 20% 10V

.CHIP, CERAMIC

Part No.	SP	Description
1-163-083-00	s	CAP, CHIP CERAMIC 1pF ±0.25pF 50V
1-163-085-00	s	CAP, CHIP CERAMIC 2pF ±0.25pF 50V
1-163-087-00	s	CAP, CHIP CERAMIC 4pF ±0.25pF 50V
1-163-089-00	s	CAP, CHIP CERAMIC 6pF ±0.5pF 50V
1-163-091-00	s	CAP, CHIP CERAMIC 8pF ±0.5pF 50V
1-163-093-00	s	CAP, CHIP CERAMIC 10pF 5% 50V
1-163-097-00	s	CAP, CHIP CERAMIC 15pF 5% 50V
1-163-101-00	s	CAP, CHIP CERAMIC 22pF 5% 50V
1-163-105-00	s	CAP, CHIP CERAMIC 33pF 5% 50V
1-163-109-00	s	CAP, CHIP CERAMIC 47pF 5% 50V
1-163-113-00	s	CAP, CHIP CERAMIC 68pF 5% 50V
1-163-117-00	s	CAP, CHIP CERAMIC 100pF 5% 50V
1-163-121-00	s	CAP, CHIP CERAMIC 150pF 5% 50V
1-163-125-00	s	CAP, CHIP CERAMIC 220pF 5% 50V
1-163-129-00	s	CAP, CHIP CERAMIC 330pF 5% 50V
1-163-133-00	s	CAP, CHIP CERAMIC 470pF 5% 50V
1-163-137-00	s	CAP, CHIP CERAMIC 680pF 5% 50V
1-163-141-00	s	CAP, CHIP CERAMIC 1000pF 5% 50V
1-163-145-00	s	CAP, CHIP CERAMIC 1500pF 10% 50V
1-163-013-00	s	CAP, CHIP CERAMIC 2200pF 10% 50V
1-163-015-00	s	CAP, CHIP CERAMIC 3300pF 10% 50V
1-163-017-00	s	CAP, CHIP CERAMIC 4700pF 10% 50V
1-163-019-00	s	CAP, CHIP CERAMIC 6800pF 10% 50V
1-163-021-00	s	CAP, CHIP CERAMIC 0.01 10% 50V
1-163-023-00	s	CAP, CHIP CERAMIC 0.015 10% 50V
1-163-034-00	s	CAP, CHIP CERAMIC 0.033 50V
1-163-035-00	s	CAP, CHIP CERAMIC 0.047 50V
1-163-036-00	s	CAP, CHIP CERAMIC 0.068 50V
1-163-038-00	s	CAP, CHIP CERAMIC 0.1 50V

INDUCTOR

.MICRO

Part No.	SP	Description
1-408-397-00	s	INDUCTOR, MICRO 1.0 5%
1-408-399-00	s	INDUCTOR, MICRO 1.5 5%
1-408-400-00	s	INDUCTOR, MICRO 1.8 5%
1-408-401-00	s	INDUCTOR, MICRO 2.2 5%
1-408-403-00	s	INDUCTOR, MICRO 3.3 5%
1-408-404-00	s	INDUCTOR, MICRO 3.9 5%
1-408-405-00	s	INDUCTOR, MICRO 4.7 5%
1-408-406-00	s	INDUCTOR, MICRO 5.6 5%
1-408-407-00	s	INDUCTOR, MICRO 6.8 5%
1-408-408-00	s	INDUCTOR, MICRO 8.2 5%
1-408-409-00	s	INDUCTOR, MICRO 10 5%
1-408-410-00	s	INDUCTOR, MICRO 12 5%
1-408-411-00	s	INDUCTOR, MICRO 15 5%
1-408-412-00	s	INDUCTOR, MICRO 18 5%
1-408-413-00	s	INDUCTOR, MICRO 22 5%
1-408-414-00	s	INDUCTOR, MICRO 27 5%
1-408-415-00	s	INDUCTOR, MICRO 33 5%
1-408-416-00	s	INDUCTOR, MICRO 39 5%
1-408-417-00	s	INDUCTOR, MICRO 47 5%
1-408-418-00	s	INDUCTOR, MICRO 56 5%
1-408-419-00	s	INDUCTOR, MICRO 68 5%
1-408-420-00	s	INDUCTOR, MICRO 82 5%
1-408-421-00	s	INDUCTOR, MICRO 100 5%
1-408-422-00	s	INDUCTOR, MICRO 120 5%
1-408-423-00	s	INDUCTOR, MICRO 150 5%
1-408-424-00	s	INDUCTOR, MICRO 180 5%
1-408-425-00	s	INDUCTOR, MICRO 220 5%
1-408-426-00	s	INDUCTOR, MICRO 270 5%
1-408-427-00	s	INDUCTOR, MICRO 330 5%
1-408-428-00	s	INDUCTOR, MICRO 390 5%
1-408-429-00	s	INDUCTOR, MICRO 470 5%
1-410-116-11	s	INDUCTOR, MICRO 560 5%
1-410-492-11	s	INDUCTOR, MICRO 680 5%
1-410-493-11	s	INDUCTOR, MICRO 820 5%
1-410-494-11	s	INDUCTOR, MICRO 1000 5%

RESISTOR

.CARBON

Part No.	SP	Description
1-249-381-11	s	RES, CARBON 1.0 5% 1/6W
1-249-382-11	s	RES, CARBON 1.2 5% 1/6W
1-249-383-11	s	RES, CARBON 1.5 5% 1/6W
1-249-384-11	s	RES, CARBON 1.8 5% 1/6W
1-249-385-11	s	RES, CARBON 2.2 5% 1/6W
1-249-386-11	s	RES, CARBON 2.7 5% 1/6W
1-249-387-11	s	RES, CARBON 3.3 5% 1/6W
1-249-388-11	s	RES, CARBON 3.9 5% 1/6W
1-249-389-11	s	RES, CARBON 4.7 5% 1/6W
1-249-390-11	s	RES, CARBON 5.6 5% 1/6W
1-249-391-11	s	RES, CARBON 6.8 5% 1/6W
1-249-392-11	s	RES, CARBON 8.2 5% 1/6W
1-249-393-11	s	RES, CARBON 10 5% 1/6W
1-249-394-11	s	RES, CARBON 12 5% 1/6W
1-249-395-11	s	RES, CARBON 15 5% 1/6W
1-249-396-11	s	RES, CARBON 18 5% 1/6W
1-249-397-11	s	RES, CARBON 22 5% 1/6W
1-249-398-11	s	RES, CARBON 27 5% 1/6W
1-249-399-11	s	RES, CARBON 33 5% 1/6W
1-249-400-11	s	RES, CARBON 39 5% 1/6W
1-249-401-11	s	RES, CARBON 47 5% 1/6W
1-249-402-11	s	RES, CARBON 56 5% 1/6W
1-249-403-11	s	RES, CARBON 68 5% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-249-404-11	s	RES, CARBON 82 5% 1/6W
1-249-405-11	s	RES, CARBON 100 5% 1/6W
1-249-406-11	s	RES, CARBON 120 5% 1/6W
1-249-407-11	s	RES, CARBON 150 5% 1/6W
1-249-408-11	s	RES, CARBON 180 5% 1/6W
1-249-409-11	s	RES, CARBON 220 5% 1/6W
1-249-410-11	s	RES, CARBON 270 5% 1/6W
1-249-411-11	s	RES, CARBON 330 5% 1/6W
1-249-412-11	s	RES, CARBON 390 5% 1/6W
1-249-413-11	s	RES, CARBON 470 5% 1/6W
1-249-414-11	s	RES, CARBON 560 5% 1/6W
1-249-415-11	s	RES, CARBON 680 5% 1/6W
1-249-416-11	s	RES, CARBON 820 5% 1/6W
1-249-417-11	s	RES, CARBON 1.0k 5% 1/6W
1-249-418-11	s	RES, CARBON 1.2k 5% 1/6W
1-249-419-11	s	RES, CARBON 1.5k 5% 1/6W
1-249-420-11	s	RES, CARBON 1.8k 5% 1/6W
1-249-421-11	s	RES, CARBON 2.2k 5% 1/6W
1-249-422-11	s	RES, CARBON 2.7k 5% 1/6W
1-249-423-11	s	RES, CARBON 3.3k 5% 1/6W
1-249-424-11	s	RES, CARBON 3.9k 5% 1/6W
1-249-425-11	s	RES, CARBON 4.7k 5% 1/6W
1-249-426-11	s	RES, CARBON 5.6k 5% 1/6W
1-249-427-11	s	RES, CARBON 6.8k 5% 1/6W
1-249-428-11	s	RES, CARBON 8.2k 5% 1/6W
1-249-429-11	s	RES, CARBON 10k 5% 1/6W
1-249-430-11	s	RES, CARBON 12k 5% 1/6W
1-249-431-11	s	RES, CARBON 15k 5% 1/6W
1-249-432-11	s	RES, CARBON 18k 5% 1/6W
1-249-433-11	s	RES, CARBON 22k 5% 1/6W
1-249-434-11	s	RES, CARBON 27k 5% 1/6W
1-249-435-11	s	RES, CARBON 33k 5% 1/6W
1-249-436-11	s	RES, CARBON 39k 5% 1/6W
1-249-437-11	s	RES, CARBON 47k 5% 1/6W
1-249-438-11	s	RES, CARBON 56k 5% 1/6W
1-249-439-11	s	RES, CARBON 68k 5% 1/6W
1-249-440-11	s	RES, CARBON 82k 5% 1/6W
1-249-441-11	s	RES, CARBON 100k 5% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W

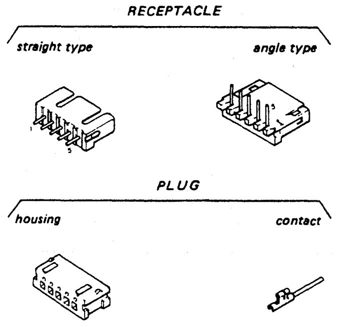
Part No.	SP	Description
.METAL		
1-215-373-31	s	RES, METAL 10 1% 1/6W
1-215-374-00	s	RES, METAL 11 1% 1/6W
1-215-375-00	s	RES, METAL 12 1% 1/6W
1-215-376-00	s	RES, METAL 13 1% 1/6W
1-215-377-00	s	RES, METAL 15 1% 1/6W
1-215-378-00	s	RES, METAL 16 1% 1/6W
1-215-379-00	s	RES, METAL 18 1% 1/6W
1-215-380-00	s	RES, METAL 20 1% 1/6W
1-215-381-00	s	RES, METAL 22 1% 1/6W
1-215-382-00	s	RES, METAL 24 1% 1/6W
1-215-383-00	s	RES, METAL 27 1% 1/6W
1-215-384-00	s	RES, METAL 30 1% 1/6W
1-215-385-00	s	RES, METAL 33 1% 1/6W
1-215-386-00	s	RES, METAL 36 1% 1/6W
1-215-387-00	s	RES, METAL 39 1% 1/6W
1-215-388-00	s	RES, METAL 43 1% 1/6W
1-215-389-00	s	RES, METAL 47 1% 1/6W
1-215-390-00	s	RES, METAL 51 1% 1/6W
1-215-391-00	s	RES, METAL 56 1% 1/6W
1-215-392-00	s	RES, METAL 62 1% 1/6W
1-215-393-00	s	RES, METAL 68 1% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-215-395-00	s	RES, METAL 82 1% 1/6W
1-215-396-00	s	RES, METAL 91 1% 1/6W
1-215-397-00	s	RES, METAL 100 1% 1/6W
1-215-398-00	s	RES, METAL 110 1% 1/6W
1-215-399-00	s	RES, METAL 120 1% 1/6W
1-215-400-00	s	RES, METAL 130 1% 1/6W
1-215-401-00	s	RES, METAL 150 1% 1/6W
1-215-402-00	s	RES, METAL 160 1% 1/6W
1-215-403-00	s	RES, METAL 180 1% 1/6W
1-215-404-00	s	RES, METAL 200 1% 1/6W
1-215-405-00	s	RES, METAL 220 1% 1/6W
1-215-406-00	s	RES, METAL 240 1% 1/6W
1-215-407-00	s	RES, METAL 270 1% 1/6W
1-215-408-00	s	RES, METAL 300 1% 1/6W
1-215-409-00	s	RES, METAL 330 1% 1/6W
1-215-410-00	s	RES, METAL 360 1% 1/6W
1-215-411-00	s	RES, METAL 390 1% 1/6W
1-215-412-00	s	RES, METAL 430 1% 1/6W
1-215-413-00	s	RES, METAL 470 1% 1/6W
1-215-414-00	s	RES, METAL 510 1% 1/6W
1-215-415-00	s	RES, METAL 560 1% 1/6W
1-215-416-00	s	RES, METAL 620 1% 1/6W
1-215-417-00	s	RES, METAL 680 1% 1/6W
1-215-418-00	s	RES, METAL 750 1% 1/6W
1-215-419-00	s	RES, METAL 820 1% 1/6W
1-215-420-00	s	RES, METAL 910 1% 1/6W
1-215-421-00	s	RES, METAL 1.0k 1% 1/6W
1-215-422-00	s	RES, METAL 1.1k 1% 1/6W
1-215-423-00	s	RES, METAL 1.2k 1% 1/6W
1-215-424-00	s	RES, METAL 1.3k 1% 1/6W
1-215-425-00	s	RES, METAL 1.5k 1% 1/6W
1-215-426-00	s	RES, METAL 1.6k 1% 1/6W
1-215-427-00	s	RES, METAL 1.8k 1% 1/6W
1-215-428-00	s	RES, METAL 2.0k 1% 1/6W
1-215-429-00	s	RES, METAL 2.2k 1% 1/6W
1-215-430-00	s	RES, METAL 2.4k 1% 1/6W
1-215-431-00	s	RES, METAL 2.7k 1% 1/6W
1-215-432-00	s	RES, METAL 3.0k 1% 1/6W

Part No.	SP	Description
1-215-433-00	s	RES, METAL 3.3k 1% 1/6W
1-215-434-00	s	RES, METAL 3.6k 1% 1/6W
1-215-435-00	s	RES, METAL 3.9k 1% 1/6W
1-215-436-00	s	RES, METAL 4.3k 1% 1/6W
1-215-437-00	s	RES, METAL 4.7k 1% 1/6W
1-215-438-00	s	RES, METAL 5.1k 1% 1/6W
1-215-439-00	s	RES, METAL 5.6k 1% 1/6W
1-215-440-00	s	RES, METAL 6.2k 1% 1/6W
1-215-441-00	s	RES, METAL 6.8k 1% 1/6W
1-215-442-00	s	RES, METAL 7.5k 1% 1/6W
1-215-443-00	s	RES, METAL 8.2k 1% 1/6W
1-215-444-00	s	RES, METAL 9.1k 1% 1/6W
1-215-445-00	s	RES, METAL 10k 1% 1/6W
1-215-446-00	s	RES, METAL 11k 1% 1/6W
1-215-447-00	s	RES, METAL 12k 1% 1/6W
1-215-448-00	s	RES, METAL 13k 1% 1/6W
1-215-449-00	s	RES, METAL 15k 1% 1/6W
1-215-450-00	s	RES, METAL 16k 1% 1/6W
1-215-451-00	s	RES, METAL 18k 1% 1/6W
1-215-452-00	s	RES, METAL 20k 1% 1/6W
1-215-453-00	s	RES, METAL 22k 1% 1/6W
1-215-454-00	s	RES, METAL 24k 1% 1/6W
1-215-455-00	s	RES, METAL 27k 1% 1/6W
1-215-456-00	s	RES, METAL 30k 1% 1/6W
1-215-457-00	s	RES, METAL 33k 1% 1/6W
1-215-458-00	s	RES, METAL 36k 1% 1/6W
1-215-459-00	s	RES, METAL 39k 1% 1/6W
1-215-460-00	s	RES, METAL 43k 1% 1/6W
1-215-461-00	s	RES, METAL 47k 1% 1/6W
1-215-462-00	s	RES, METAL 51k 1% 1/6W
1-215-463-00	s	RES, METAL 56k 1% 1/6W
1-215-464-00	s	RES, METAL 62k 1% 1/6W
1-215-465-00	s	RES, METAL 68k 1% 1/6W
1-215-466-00	s	RES, METAL 75k 1% 1/6W
1-215-467-00	s	RES, METAL 82k 1% 1/6W
1-215-468-00	s	RES, METAL 91k 1% 1/6W
1-215-469-00	s	RES, METAL 100k 1% 1/6W
1-215-470-00	s	RES, METAL 110k 1% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-472-00	s	RES, METAL 130k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-474-00	s	RES, METAL 160k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-476-00	s	RES, METAL 200k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-478-00	s	RES, METAL 240k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-480-00	s	RES, METAL 300k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-482-00	s	RES, METAL 360k 1% 1/6W
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-484-00	s	RES, METAL 430k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-486-00	s	RES, METAL 510k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-488-00	s	RES, METAL 620k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-490-00	s	RES, METAL 750k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-492-00	s	RES, METAL 910k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W

Part No.	SP	Description
.CHIP		
1-216-295-00	s	RES, CHIP 0 5% 1/10W
1-216-298-00	s	RES, CHIP 2.2 5% 1/10W
1-216-302-00	s	RES, CHIP 2.7 5% 1/10W
1-216-304-00	s	RES, CHIP 3.3 5% 1/10W
1-216-306-00	s	RES, CHIP 3.9 5% 1/10W
1-216-308-00	s	RES, CHIP 4.7 5% 1/10W
1-216-309-00	s	RES, CHIP 5.6 5% 1/10W
1-216-311-00	s	RES, CHIP 6.8 5% 1/10W
1-216-313-00	s	RES, CHIP 8.2 5% 1/10W
1-216-001-00	s	RES, CHIP 10 5% 1/10W
1-216-003-00	s	RES, CHIP 12 5% 1/10W
1-216-005-00	s	RES, CHIP 15 5% 1/10W
1-216-007-00	s	RES, CHIP 18 5% 1/10W
1-216-009-00	s	RES, CHIP 22 5% 1/10W
1-216-011-00	s	RES, CHIP 27 5% 1/10W
1-216-013-00	s	RES, CHIP 33 5% 1/10W
1-216-015-00	s	RES, CHIP 39 5% 1/10W
1-216-017-00	s	RES, CHIP 47 5% 1/10W
1-216-019-00	s	RES, CHIP 56 5% 1/10W
1-216-021-00	s	RES, CHIP 68 5% 1/10W
1-216-023-00	s	RES, CHIP 82 5% 1/10W
1-216-025-00	s	RES, CHIP 100 5% 1/10W
1-216-027-00	s	RES, CHIP 120 5% 1/10W
1-216-029-00	s	RES, CHIP 150 5% 1/10W
1-216-031-00	s	RES, CHIP 180 5% 1/10W
1-216-033-00	s	RES, CHIP 220 5% 1/10W
1-216-035-00	s	RES, CHIP 270 5% 1/10W
1-216-037-00	s	RES, CHIP 330 5% 1/10W
1-216-039-00	s	RES, CHIP 390 5% 1/10W
1-216-041-00	s	RES, CHIP 470 5% 1/10W
1-216-043-00	s	RES, CHIP 560 5% 1/10W
1-216-045-00	s	RES, CHIP 680 5% 1/10W
1-216-047-00	s	RES, CHIP 820 5% 1/10W
1-216-049-00	s	RES, CHIP 1k 5% 1/10W
1-216-051-00	s	RES, CHIP 1.2k 5% 1/10W
1-216-053-00	s	RES, CHIP 1.5k 5% 1/10W
1-216-055-00	s	RES, CHIP 1.8k 5% 1/10W
1-216-057-00	s	RES, CHIP 2.2k 5% 1/10W
1-216-059-00	s	RES, CHIP 2.7k 5% 1/10W
1-216-061-00	s	RES, CHIP 3.3k 5% 1/10W
1-216-063-00	s	RES, CHIP 3.9k 5% 1/10W
1-216-065-00	s	RES, CHIP 4.7k 5% 1/10W
1-216-067-00	s	RES, CHIP 5.6k 5% 1/10W
1-216-069-00	s	RES, CHIP 6.8k 5% 1/10W
1-216-071-00	s	RES, CHIP 8.2k 5% 1/10W
1-216-073-00	s	RES, CHIP 10k 5% 1/10W
1-216-075-00	s	RES, CHIP 12k 5% 1/10W
1-216-077-00	s	RES, CHIP 15k 5% 1/10W
1-216-079-00	s	RES, CHIP 18k 5% 1/10W
1-216-081-00	s	RES, CHIP 22k 5% 1/10W
1-216-083-00	s	RES, CHIP 27k 5% 1/10W
1-216-085-00	s	RES, CHIP 33k 5% 1/10W
1-216-087-00	s	RES, CHIP 39k 5% 1/10W
1-216-089-00	s	RES, CHIP 47k 5% 1/10W
1-216-091-00	s	RES, CHIP 56k 5% 1/10W
1-216-093-00	s	RES, CHIP 68k 5% 1/10W
1-216-095-00	s	RES, CHIP 82k 5% 1/10W
1-216-097-00	s	RES, CHIP 100k 5% 1/10W
1-216-099-00	s	RES, CHIP 120k 5% 1/10W
1-216-101-00	s	RES, CHIP 150k 5% 1/10W
1-216-103-00	s	RES, CHIP 180k 5% 1/10W
1-216-105-00	s	RES, CHIP 220k 5% 1/10W
1-216-107-00	s	RES, CHIP 270k 5% 1/10W
1-216-109-00	s	RES, CHIP 330k 5% 1/10W
1-216-111-00	s	RES, CHIP 390k 5% 1/10W
1-216-113-00	s	RES, CHIP 470k 5% 1/10W
1-216-115-00	s	RES, CHIP 560k 5% 1/10W
1-216-117-00	s	RES, CHIP 680k 5% 1/10W
1-216-119-00	s	RES, CHIP 820k 5% 1/10W
1-216-121-00	s	RES, CHIP 1.0M 5% 1/10W
1-216-123-00	s	RES, CHIP 1.2M 5% 1/10W
1-216-125-00	s	RES, CHIP 1.5M 5% 1/10W
1-216-127-00	s	RES, CHIP 1.8M 5% 1/10W
1-216-129-00	s	RES, CHIP 2.2M 5% 1/10W
1-216-131-00	s	RES, CHIP 2.7M 5% 1/10W
1-216-133-00	s	RES, CHIP 3.3M 5% 1/10W

CONNECTOR

Part No.	SP	Description
1-564-001-11	o	RECEPTACLE 2P MALE (STRAIGHT TYPE)
1-564-012-11	o	RECEPTACLE 2P MALE (ANGLE TYPE)
1-562-147-11	o	HOUSING 2P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-002-11	o	RECEPTACLE 3P MALE (STRAIGHT TYPE)
1-564-013-11	o	RECEPTACLE 3P MALE (ANGLE TYPE)
1-562-148-11	o	HOUSING 3P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-003-11	o	RECEPTACLE 4P MALE (STRAIGHT TYPE)
1-564-014-11	o	RECEPTACLE 4P MALE (ANGLE TYPE)
1-562-149-11	o	HOUSING 4P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-004-11	o	RECEPTACLE 5P MALE (STRAIGHT TYPE)
1-564-015-11	o	RECEPTACLE 5P MALE (ANGLE TYPE)
1-562-150-11	o	HOUSING 5P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-005-11	o	RECEPTACLE 6P MALE (STRAIGHT TYPE)
1-564-016-11	o	RECEPTACLE 6P MALE (ANGLE TYPE)
1-562-151-11	o	HOUSING 6P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-006-11	o	RECEPTACLE 7P MALE (STRAIGHT TYPE)
1-564-017-11	o	RECEPTACLE 7P MALE (ANGLE TYPE)
1-562-152-11	o	HOUSING 7P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-007-11	o	RECEPTACLE 8P MALE (STRAIGHT TYPE)
1-564-018-11	o	RECEPTACLE 8P MALE (ANGLE TYPE)
1-562-153-11	o	HOUSING 8P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-008-41	o	RECEPTACLE 9P MALE (STRAIGHT TYPE)
1-564-019-11	o	RECEPTACLE 9P MALE (ANGLE TYPE)
1-562-154-11	o	HOUSING 9P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-009-11	o	RECEPTACLE 10P MALE (STRAIGHT TYPE)
1-564-020-11	o	RECEPTACLE 10P MALE (ANGLE TYPE)
1-562-155-11	o	HOUSING 10P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-010-21	o	RECEPTACLE 11P MALE (STRAIGHT TYPE)
1-564-021-11	o	RECEPTACLE 11P MALE (ANGLE TYPE)
1-562-156-11	o	HOUSING 11P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-011-11	o	RECEPTACLE 12P MALE (STRAIGHT TYPE)
1-564-022-11	o	RECEPTACLE 12P MALE (ANGLE TYPE)
1-562-157-11	o	HOUSING 12P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-683-11	o	RECEPTACLE 13P MALE (STRAIGHT TYPE)
1-564-743-11	o	RECEPTACLE 13P MALE (ANGLE TYPE)
1-562-627-11	o	HOUSING 13P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-069-11	o	RECEPTACLE 14P MALE (STRAIGHT TYPE)
1-564-630-11	o	RECEPTACLE 14P MALE (ANGLE TYPE)
1-562-185-11	o	HOUSING 14P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-855-11	o	RECEPTACLE 15P MALE (STRAIGHT TYPE)
1-564-877-11	o	RECEPTACLE 15P MALE (ANGLE TYPE)
1-562-958-11	o	HOUSING 15P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32



PARTS CHANGE INFORMATION

.In this parts list, **) marked parts are design-changed.
.Applicable Serial No. are as follows:

1) Marked parts are for
Serial No. up to 10400

2) Marked parts are for
Serial No. 10401 and higher

3) Marked parts are for
Serial No. up to 10800

4) Marked parts are for
Serial No. 10801 and higher

5) Marked parts are for
Serial No. up to 11100

6) Marked parts are for
Serial No. 11101 and higher

Ref No.	Parts No.	SP	Description
AC-89 BOARD			
	1-622-786-11	o	PRINTED CIRCUIT BOARD, AC-89
	1-533-189-11	o	HOLDER, FUSE
⚠C1	1-136-211-00	s	FILM 0.022 20% 250V
C2	1-130-711-00	s	FILM 0.22 20% 250V
⚠CN1	1-506-371-00	o	2P PLUG (L)
⚠F1	1-532-203-00	s	FUSE, TIME-LAG 2.0A 250V
⚠L1	1-421-556-21	s	LINE FILTER
⚠R1	1-214-937-00	s	CARBON 1M 5% 1/2W
AU-82 BOARD			
	A-6713-277-A	o	MOUNTED CIRCUIT BOARD, AU-82
C5	1-124-499-11	s	ELECT 1 20% 50V
C8	1-124-499-11	s	ELECT 1 20% 50V
C14	1-162-199-31	s	CERAMIC 10PF 5% 50V
C21	1-130-471-00	s	MYLAR 0.001 5% 50V
C54	1-124-903-00	s	ELECT 1 20% 50V
C101	1-123-055-61	s	ELECT 47 20% 16V
C102	1-162-286-31	s	CERAMIC 220PF 10% 50V
C151	1-109-621-00	s	MICA 220PF 5% 500V
C152	1-162-290-31	s	CERAMIC 470PF 10% 50V
C162	1-162-219-31	s	CERAMIC 68PF 5% 50V
C212	1-162-199-31	s	CERAMIC 10PF 5% 50V
C254	1-124-499-11	s	ELECT 1 20% 50V
C301	1-123-055-61	s	ELECT 47 20% 16V
C304	1-162-286-31	s	CERAMIC 220PF 10% 50V
C351	1-109-621-00	s	MICA 220PF 5% 500V
C352	1-162-290-31	s	CERAMIC 470PF 10% 50V
C361	1-162-219-31	s	CERAMIC 68PF 5% 50V
C605	1-109-677-31	s	MICA 150PF 5% 500V
C606	1-109-677-31	s	MICA 150PF 5% 500V
C611	1-109-568-11		MICA 300PF 5% 500V
C612	1-109-576-00	s	MICA 620PF 5% 500V
C613	1-129-703-00	s	FILM 0.0012 10% 630V
C615	1-129-704-00	s	FILM 0.0015 10% 630V
CP601	1-464-805-11	s	OSCILLATION UNIT, BIAS
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
D7	8-719-109-91	s	RD6.2ES-B
D8	8-719-109-91	s	RD6.2ES-B
D9	8-719-911-19	s	1SS119
D10	8-719-911-19	s	1SS119
D51	8-719-911-19	s	1SS119
D52	8-719-911-19	s	1SS119
D53	8-719-911-19	s	1SS119
D101	8-719-911-19	s	1SS119
D102	8-719-911-19	s	1SS119
D103	8-719-911-19	s	1SS119
D104	8-719-109-91	s	RD6.2ES-B
D151	8-719-109-91	s	RD6.2ES-B
D201	8-719-911-19	s	1SS119
D202	8-719-911-19	s	1SS119
D204	8-719-109-01	s	RD6.2ES-B
D205	8-719-911-19	s	1SS119
D206	8-719-911-19	s	1SS119
D251	8-719-911-19	s	1SS119
D301	8-719-911-19	s	1SS119
D302	8-719-911-19	s	1SS119
D303	8-719-911-19	s	1SS119
D351	8-719-109-91	s	RD6.2ES-B
D401	8-719-109-91	s	RD6.2ES-B
D451	8-719-109-91	s	RD6.2ES-B
D452	8-719-911-19	s	1SS119
D501	8-719-109-91	s	RD6.2ES-B
D502	8-719-911-19	s	1SS119
D503	8-719-200-77	s	10E2N
D504	8-719-911-19	s	1SS119
D505	8-719-911-19	s	1SS119
D506	8-719-911-19	s	1SS119
D507	8-719-100-01	s	RD2.0E-B
D601	8-719-109-64	s	RD3.3ES-B
D602	8-719-200-77	s	10E2N
D603	8-719-200-77	s	10E2N
IC1	8-759-705-62	s	NJM4562D-D (JRC)
IC2	8-759-208-10	s	TC4053BPHB (TOSHIBA)
IC3	8-759-705-62	s	NJM4562D-D (JRC)
IC51	8-759-802-46	s	LA4550 (SANYO)
IC101	8-759-700-04	s	NJM2043D-D (JRC)
IC102	8-759-705-62	s	NJM4562D-D (JRC)
IC151	8-759-705-58	s	NJM4558D-D (TOSHIBA)
IC202	8-759-208-10	s	TC4053BPHB (JRC)
IC351	8-759-705-58	s	NJM4558D-D (JRC)
IC401	8-759-240-11	s	TC4011BP (TOSHIBA)
L1	1-407-519-00	s	8uH
L201	1-407-519-00	s	8uH
LV101	1-459-434-00	s	VAR 22mH
LV151	1-459-434-00	s	VAR 22mH
LV152	1-459-434-00	s	VAR 22mH
LV301	1-459-434-00	s	VAR 22mH
LV302	1-459-434-00	s	VAR 22mH
LV351	1-459-434-00	s	VAR 22mH
LV352	1-459-434-00	s	VAR 22mH
LV601	1-407-283-00	s	VAR 0.68mH
LV602	1-410-859-11	s	VAR 240uH

Ref No.	Parts No.	SP	Description
Q1	8-729-178-55	s	2SC2785-E
Q2	8-729-115-10	s	2SK105A-10
Q3	8-729-178-55	s	2SC2785-E
Q4	8-729-178-55	s	2SC2785-E
Q5	8-729-178-55	s	2SC2785-E
Q6	8-729-178-55	s	2SC2785-E
Q7	8-729-201-05	s	2SC2878-B
Q8	8-729-178-55	s	2SC2785-E
Q51	8-729-201-05	s	2SC2878-B
Q52	8-729-178-55	s	2SC2785-E
Q53	8-729-178-55	s	2SC2785-E
Q54	8-729-201-05	s	2SC2878-B
Q55	8-729-201-05	s	2SC2878-B
Q101	8-729-178-55	s	2SC2785-E
Q102	8-729-178-55	s	2SC2785-E
Q103	8-729-117-54	s	2SA1175-K
Q105	8-729-201-05	s	2SC2878-B
Q106	8-729-201-05	s	2SC2878-B
Q151	8-729-2-1-05	s	2SC2878-B
Q152	8-729-178-55	s	2SC2785-E
Q153	8-729-178-55	s	2SC2785-E
Q154	8-729-201-05	s	2SC2878-B
Q201	8-729-178-55	s	2SC2785-E
Q202	8-729-178-55	s	2SC2785-E
Q203	8-729-178-55	s	2SC2785-E
Q204	8-729-178-55	s	2SC2785-E
Q206	8-729-201-05	s	2SC2878-B
Q207	8-729-178-55	s	2SC2785-E
Q208	8-729-178-55	s	2SC2785-E
Q251	8-729-201-05	s	2SC2878-B
Q252	8-729-178-55	s	2SC2785-E
Q301	8-729-178-55	s	2SC2785-E
Q302	8-729-178-55	s	2SC2785-E
Q303	8-729-117-54	s	2SA1175-K
Q304	8-729-201-05	s	2SC2878-B
Q305	8-729-178-55	s	2SC2785-E
Q306	8-729-201-05	s	2SC2878-B
Q351	8-729-201-05	s	2SC2878-B
Q352	8-729-178-55	s	2SC278-E
Q353	8-729-178-55	s	2SC278-E
Q354	8-729-201-05	s	2SC2878-B
Q401	8-729-178-55	s	2SC2785-E
Q402	8-729-117-54	s	2SA1175-K
Q403	8-729-117-54	s	2SA1175-K
Q451	8-729-178-55	s	2SC2785-E
Q452	8-729-117-54	s	2SA1175-K
Q453	8-729-117-54	s	2SA1175-K
Q501	8-729-178-55	s	2SC2785-E
Q502	8-729-113-33	s	2SB733-4
Q503	8-729-117-56	s	2SA1175-K
Q601	8-729-201-05	s	2SC2878-B
Q602	8-729-117-54	s	2SA1175-K
Q603	8-729-177-33	s	2SD773-4
Q604	8-729-178-55	s	2SC2785-E
Q605	8-729-900-65	s	DTA144ES
Q606	8-729-201-05	s	2SC2878-B
Q607	8-729-117-54	s	2SA1175-K
Q608	8-729-177-33	s	2SD773-4

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
R8	1-247-883-00	s	CARBON 150k 5% 1/4W
R19	1-247-887-00	s	CARBON 220k 5% 1/4W
R40	1-247-891-00	s	CARBON 330k 5% 1/4W
R104	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R109	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R177	1-247-887-00	s	CARBON 220k 5% 1/4W
R124	1-247-881-00	s	CARBON 120k 5% 1/4W
R126	1-247-881-00	s	CARBON 120k 5% 1/4W
R159	1-247-883-00	s	CARBON 150k 5% 1/4W
R204	1-247-891-00	s	CARBON 330k 5% 1/4W
R216	1-247-887-00	s	CARBON 220k 5% 1/4W
R236	1-247-883-00	s	CARBON 150k 5% 1/4W
R304	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R309	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R321	1-247-887-00	s	CARBON 220k 5% 1/4W
R327	1-247-881-00	s	CARBON 120k 5% 1/4W
R329	1-247-881-00	s	CARBON 120k 5% 1/4W
R359	1-247-883-00	s	CARBON 150k 5% 1/4W
R507	1-247-885-00	s	CARBON 180k 5% 1/4W
RV1	1-228-996-00	s	VAR, CARBON 47k
RV51	1-228-990-00	s	VAR, CARBON 1k
RV101	1-228-994-00	s	VAR, CARBON 10k
RV102	1-228-994-00	s	VAR, CARBON 10k
RV103	1-228-993-00	s	VAR, CARBON 4.7k
RV151	1-228-993-00	s	VAR, CARBON 4.7k
RV152	1-228-993-00	s	VAR, CARBON 4.7k
RV201	1-228-996-00	s	VAR, CARBON 47k
RV251	1-228-990-00	s	VAR, CARBON 1k
RV301	1-228-994-00	s	VAR, CARBON 10k
RV302	1-228-994-00	s	VAR, CARBON 10k
RV303	1-228-994-00	s	VAR, CARBON 10k
RV304	1-228-993-00	s	VAR, CARBON 4.7k
RV351	1-228-993-00	s	VAR, CARBON 4.7k
RV352	1-228-993-00	s	VAR, CARBON 4.7k
RV601	1-228-997-00	s	VAR, CARBON 100k
RV602	1-228-997-00	s	VAR, CARBON 100k
RV603	1-228-995-00	s	VAR, CARBON 22k
RV604	1-228-994-00	s	VAR, CARBON 10k
RY601	1-515-614-11	s	RELAY 12V 16.6A

Ref No.	Parts No.	SP	Description			
AU-89 BOARD						
	A-6713-278-A	o	MOUNTED CIRCUIT BOARD, AU-89			
C3	1-136-230-00	s	FILM	0.0022	3%	100V
C4	1-136-230-00	s	FILM	0.0022	3%	100V
C5	1-136-257-00	s	FILM	0.0039	3%	100V
C6	1-131-345-00	s	TANTALUM	0.47	10%	35V
C9	1-136-165-00	s	MYLAR	0.1	10%	50V
C10	1-136-169-00	s	MYLAR	0.22	10%	50V
C11	1-136-163-00	s	MYLAR	0.068	10%	50V
C13	1-130-339-00	s	FILM	0.0056	3%	100V
C16	1-136-165-00	s	MYLAR	0.1	10%	50V
C20	1-136-159-00	s	MYLAR	0.033	10%	50V
C21	1-130-519-00	s	MYLAR	0.018	10%	50V
C22	1-130-519-00	s	MYLAR	0.018	10%	50V
C103	1-136-230-00	s	FILM	0.0022	3%	100V
C104	1-136-230-00	s	FILM	0.0022	3%	100V
C105	1-136-257-00	s	FILM	0.0039	3%	100V
C106	1-131-345-00	s	TANTALUM	0.47	10%	35V
C109	1-136-165-00	s	MYLAR	0.1	10%	50V
C110	1-136-169-00	s	MYLAR	0.22	10%	50V
C111	1-136-163-00	s	MYLAR	0.068	10%	50V
C113	1-130-339-00	s	FILM	0.0056	3%	100V
C116	1-136-165-00	s	MYLAR	0.1	10%	50V
C120	1-136-159-00	s	MYLAR	0.033	10%	50V
C121	1-130-519-00	s	MYLAR	0.018	10%	50V
C122	1-130-519-00	s	MYLAR	0.018	10%	50V
C201	1-131-372-00	s	TANTALUM	15	10%	16V
C202	1-131-363-00	s	TANTALUM	4.7	10%	16V
C203	1-136-164-00	s	MYLAR	0.082	10%	50V
C204	1-131-372-00	s	TANTALUM	15	10%	16V
C205	1-131-363-00	s	TANTALUM	4.7	10%	16V
C206	1-136-153-00	s	MYLAR	0.01	10%	50V
C207	1-136-164-00	s	MYLAR	0.082	10%	50V
2) C214	1-124-499-11	s	ELECT	1	20%	50V
C301	1-131-404-00	s	ELECT (SOLID)	0.22	10%	25V
C303	1-131-372-00	s	TANTALUM	15	10%	16V
C306	1-131-372-00	s	TANTALUM	15	10%	16V
C307	1-124-245-00	s	ELECT	4.7	20%	16V
C308	1-136-164-00	s	MYLAR	0.082	10%	50V
C309	1-136-164-00	s	MYLAR	0.082	10%	50V
C310	1-136-168-00	s	MYLAR	0.18	10%	50V
C311	1-136-168-00	s	MYLAR	0.18	10%	50V
C312	1-136-168-00	s	MYLAR	0.18	10%	50V
C313	1-136-168-00	s	MYLAR	0.18	10%	50V
C314	1-130-519-00	s	MYLAR	0.018	10%	50V
C315	1-130-519-00	s	MYLAR	0.018	10%	50V
C316	1-136-153-00	s	MYLAR	0.01	10%	50V
C317	1-136-153-00	s	MYLAR	0.01	10%	50V
C318	1-124-236-00	s	ELECT	47	20%	16V
C319	1-124-236-00	s	ELECT	47	20%	16V
C320	1-124-236-00	s	ELECT	47	20%	16V
C321	1-124-236-00	s	ELECT	47	20%	16V
C322	1-124-236-00	s	ELECT	47	20%	16V
C323	1-124-236-00	s	ELECT	47	20%	16V
C324	1-124-236-00	s	ELECT	47	20%	16V
C325	1-124-236-00	s	ELECT	47	20%	16V
C326	1-124-236-00	s	ELECT	47	20%	16V

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
C327	1-124-236-00	s	ELECT 47 20% 16V
C328	1-124-236-00	s	ELECT 47 20% 16V
C329	1-124-236-00	s	ELECT 47 20% 16V
C330	1-124-236-00	s	ELECT 47 20% 16V
C331	1-124-236-00	s	ELECT 47 20% 16V
C332	1-124-236-00	s	ELECT 47 20% 16V
C333	1-124-236-00	s	ELECT 47 20% 16V
C334	1-124-236-00	s	ELECT 47 20% 16V
C335	1-124-236-00	s	ELECT 47 20% 16V
C336	1-124-236-00	s	ELECT 47 20% 16V
C337	1-124-236-00	s	ELECT 47 20% 16V
C338	1-124-462-00	s	ELECT 10 20% 16V
C339	1-124-234-00	s	ELECT 22 20% 16V
C340	1-124-462-00	s	ELECT 10 20% 16V
C341	1-124-234-00	s	ELECT 22 20% 16V
C342	1-124-234-00	s	ELECT 22 20% 16V
C343	1-124-462-00	s	ELECT 10 20% 16V
C344	1-124-234-00	s	ELECT 22 20% 16V
C345	1-124-462-00	s	ELECT 10 20% 16V
C350	1-124-462-00	s	ELECT 10 20% 16V
C352	1-136-153-00	s	MYLAR 0.01 10% 50V
CN252	1-506-821-11	o	HOUSING, BOARD IN CONNECTOR 12P
CN251	1-562-739-11	o	HOUSING, CONNECTOR 6P
CN253	1-506-821-11	o	HOUSING, BOARD IN CONNECTOR 12P
	1-563-186-11	o	HOUSING, CONNECTOR 12P
CP1	1-236-010-11	s	FILTER, LOW PASS
CP101	1-236-010-11	s	FILTER, LOW PASS
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D101	8-719-911-19	s	1SS119
D102	8-719-911-19	s	1SS119
D103	8-719-911-19	s	1SS119
D104	8-719-911-19	s	1SS119
D201	8-719-109-91	s	RD6.2ESB
D202	8-719-911-10	s	1SS119
D203	8-719-911-19	s	1SS119
D301	8-719-911-19	s	1SS119
D302	8-719-911-19	s	1SS119
D303	8-719-911-19	s	1SS119
D304	8-719-911-19	s	1SS119
D305	8-719-911-19	s	1SS119
D306	8-719-911-19	s	1SS119
D307	8-719-109-91	s	RD6.2ESB
IC1	8-752-018-80	s	CX20188 (SONY)
IC2	8-759-705-58	s	NUM5448D-D (JRC)
IC3	8-759-208-12	s	TC4016BPHB (TOSHIBA)
IC102	8-759-705-58	s	NJM4558D-D (JRC)
IC103	8-759-208-12	s	TC4016BPHB (TOSHIBA)

Ref No.	Parts No.	SP	Description
IC201	8-759-205-76	s	TC504013BP (TOSHIBA)
IC202	8-759-705-58	s	NJM4558D-D (JRC)
IC203	8-759-240-71	s	TC4071BP (TOSHIBA)
IC204	8-759-240-11	s	TC4011BP (TOSHIBA)
IC205	8-759-240-11	s	TC4011BP (TOSHIBA)
IC301	8-759-132-40	s	UPC324C (NEC)
IC302	8-759-132-40	s	UPC324C (NEC)
IC303	8-759-969-13	s	SN16913P (TI)
IC304	8-759-969-13	s	SN16913P (TI)
IC305	8-759-969-13	s	SN16913P (TI)
IC306	8-759-969-13	s	SN16913P (TI)
Q1	8-729-900-89	s	DTC144ES
Q101	8-729-900-89	s	DTC144ES
Q201	8-729-900-89	s	DTC144ES
Q202	8-729-178-55	s	2SC2785-E
Q203	8-729-178-55	s	2SC2785-E
Q204	8-729-178-55	s	2SC2785-E
Q205	8-729-201-05	s	2SC2878-B
Q206	8-729-900-65	s	DTA144ES
Q207	8-729-201-05	s	2SC2878-B
Q208	8-729-900-65	s	DTA144ES
Q301	8-729-900-89	s	DTC144ES
Q302	8-729-900-89	s	DTC144ES
Q303	8-729-900-89	s	DTC144ES
Q304	8-729-900-89	s	DTC144ES
Q305	8-729-900-89	s	DTC144ES
Q306	8-729-117-54	s	2SA1175-K
Q307	8-729-117-54	s	2SA1175-K
Q308	8-729-117-54	s	2SA1175-K
Q309	8-729-117-54	s	2SA1175-K
R8	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R29	1-247-895-00	s	CARBON 470k 5% 1/4W
R30	1-247-883-00	s	CARBON 150k 5% 1/4W
R108	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R129	1-247-895-00	s	CARBON 470k 5% 1/4W
R130	1-247-883-00	s	CARBON 150k 5% 1/4W
R209	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R231	1-247-887-00	s	CARBON 220k 5% 1/4W
R301	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R318	1-247-885-00	s	CARBON 180k 5% 1/4W
R319	1-247-885-00	s	CARBON 180k 5% 1/4W
R322	1-247-895-00	s	CARBON 470k 5% 1/4W
R323	1-247-895-00	s	CARBON 470k 5% 1/4W
R324	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R325	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R326	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R327	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R330	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R331	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R332	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R333	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R338	1-247-869-00	s	CARBON 39k 5% 1/4W
R339	1-247-881-00	s	CARBON 120k 5% 1/4W
R340	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R343	1-247-887-00	s	CARBON 220k 5% 1/4W

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Ref No.	Parts No.	SP	Description
RV11	1-230-722-11	s	VAR, CARBON 22k
RV111	1-230-722-11	s	VAR, CARBON 22k
RV211	1-230-720-11	s	VAR, CARBON 4.7k
RV212	1-230-720-11	s	VAR, CARBON 4.7k
RV311	1-230-726-11	s	VAR, CARBON 470k
RV312	1-230-725-11	s	VAR, CARBON 220k
RV313	1-230-722-11	s	VAR, CARBON 22k
RV314	1-230-722-11	s	VAR, CARBON 22k
RV315	1-230-718-11	s	VAR, CARBON 1k
RV316	1-230-718-11	s	VAR, CARBON 1k
RV317	1-230-722-11	s	VAR, CARBON 22k

CC-31 BOARD

Ref No.	Parts No.	SP	Description
	1-622-255-11	o	PRINTED CIRCUIT BOARD, CC-31

CC-32 BOARD

Ref No.	Parts No.	SP	Description
	1-622-256-11	o	PRINTED CIRCUIT BOARD, CC-32
IC1	8-719-940-86	s	GP1L53 "CASSETTE IN DET"

CC-33 BOARD

Ref No.	Parts No.	SP	Description
	1-622-257-11	o	PRINTED CIRCUIT BOARD, CC-33
IC1	8-719-940-86	s	GP1L53 "CASSETTE DOWN DET"

CO-7 BOARD

Ref No.	Parts No.	SP	Description
	A-6711-837-A	o	MOUNTED CIRCUIT BOARD, CO-7
C1	1-126-103-11	s	ELECT 470 20% 16V
C3	1-124-236-00	s	ELECT 47 20% 16V
C6	1-124-462-00	s	ELECT 10 20% 10V
C9	1-124-236-00	s	ELECT 47 20% 16V
C15	1-131-344-00	s	TANTALUM 0.33 10% 35V
C16	1-124-245-00	s	ELECT 4.7 20% 25V
C22	1-131-344-00	s	TANTALUM 0.33 10% 35V
C23	1-124-584-00	s	ELECT 100 20% 10V
1) C28	1-107-166-00	s	MICA 62PF 5% 500V
2) C28	1-101-886-00	s	CERAMIC 62PF 5% 50V
C32	1-124-255-00	s	ELECT 1 20% 50V
C34	1-124-236-00	s	ELECT 47 20% 16V
1) C36	1-124-245-00	s	ELECT 4.7 20% 16V
2) C36	1-131-351-00	s	TANTALUM 4.7 10% 35V
1) C38	1-124-464-11	s	ELECT 22 20% 50V
2) C38	1-131-343-00	s	TANTALUM 0.22 10% 35V
C39	1-124-236-00	s	ELECT 47 20% 16V
C47	1-124-236-00	s	ELECT 47 20% 16V
C52	1-124-462-00	s	ELECT 10 20% 10V
C53	1-162-728-11	s	CERAMIC 560PF 1% 50V
C56	1-124-255-00	s	ELECT 1 20% 50V
C57	1-124-255-00	s	ELECT 1 20% 50V
C59	1-124-462-00	s	ELECT 10 20% 10V
C60	1-124-462-00	s	ELECT 10 20% 10V
C63	1-124-255-00	s	ELECT 1 20% 50V
2) C64	1-161-379-00	s	CERAMIC 0.01 20% 16V
C70	1-124-462-00	s	ELECT 10 20% 16V
C72	1-124-255-00	s	ELECT 1 20% 50V
C73	1-124-255-00	s	ELECT 1 20% 50V
C76	1-124-255-00	s	ELECT 1 20% 50V
C77	1-124-462-00	s	ELECT 10 20% 16V
C78	1-124-255-00	s	ELECT 1 20% 50V
C80	1-124-236-00	s	ELECT 47 20% 16V
C81	1-124-584-00	s	ELECT 100 20% 10V
C82	1-124-236-00	s	ELECT 47 20% 16V
C84	1-124-462-00	s	ELECT 10 20% 16V
C88	1-124-462-00	s	ELECT 10 20% 16V
C89	1-124-462-00	s	ELECT 10 20% 10V
C91	1-124-255-00	s	ELECT 1 20% 50V
C94	1-124-255-00	s	ELECT 1 20% 50V
C96	1-124-462-00	s	ELECT 10 20% 10V
C98	1-124-234-00	s	ELECT 22 20% 16V
C99	1-124-236-00	s	ELECT 47 20% 16V
C102	1-124-257-00	s	ELECT 2.2 20% 50V
C108	1-124-255-00	s	ELECT 1 20% 50V
C110	1-124-255-00	s	ELECT 1 20% 50V
C119	1-131-349-00	s	TANTALUM 2.2 10% 25V
C120	1-131-379-00	s	TANTALUM 22 10% 10V
C121	1-131-379-00	s	TANTALUM 22 10% 10V
C122	1-131-349-00	s	TANTALUM 2.2 10% 35V
C123	1-131-349-00	s	TANTALUM 2.2 10% 35V
C124	1-124-462-00	s	ELECT 10 20% 10V
C125	1-162-289-31	s	CERAMIC 390PF 10% 50V
C126	1-124-584-00	s	ELECT 100 20% 10V
C127	1-124-255-00	s	ELECT 1 20% 50V
C514	1-124-255-00	s	ELECT 1 20% 50V
C515	1-124-462-00	s	ELECT 10 20% 10V
C516	1-124-462-00	s	ELECT 10 20% 10V
C524	1-163-033-00	s	CERAMIC CHIP 0.022 10% 25V
C525	1-124-255-00	s	ELECT 1 20% 50V
C528	1-126-101-11	s	ELECT 100 20% 16V
C530	1-124-462-00	s	ELECT 10 20% 10V
C531	1-124-462-00	s	ELECT 10 20% 10V
C533	1-124-255-00	s	ELECT 1 20% 50V
C541	1-124-462-00	s	ELECT 10 20% 10V
C543	1-124-236-00	s	ELECT 47 20% 16V
2) C701	1-163-033-00	s	CERAMIC CHIP 0.022 10% 25V
C702	1-163-091-00	s	CERAMIC CHIP 8PF 0.25PF 50V
CT100	1-141-227-00	s	CERAMIC TRIMMER

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
D1	8-719-100-05	s	1S2837
D2	8-719-100-05	s	1S2837
D3	8-719-100-05	s	1S2837
D4	8-719-100-05	s	1S2837
D5	8-719-815-59	s	1S1555-S
D6	8-719-815-59	s	1S1555-S
D7	8-719-100-05	s	1S2837
D8	8-719-100-05	s	1S2837
D9	8-719-100-05	s	1S2837
D11	8-719-104-10	s	1SS99
D14	8-719-100-05	s	1S2837
D15	8-719-100-05	s	1S2837
D16	8-719-100-05	s	1S2837
D17	8-719-911-19	s	1SS119
D18	8-719-100-05	s	1S2837
D100	8-719-101-23	s	1SS123
D101	8-719-100-05	s	1S2837
D102	8-719-915-43	s	FC54M
D103	8-719-100-05	s	1S2837
D104	8-719-100-05	s	1S2837
D105	8-719-100-03	s	1S2835
D106	8-719-100-05	s	1S2837
D107	8-719-100-03	s	1S2835
D200	8-719-911-19	s	1SS119
D201	8-719-101-23	s	1SS123
FL1	1-235-470-11	s	LOW PASS
FL2	1-236-029-11	s	BAND PASS
FL3	1-235-471-11	s	LOW PASS
IC1	8-759-908-59	s	CX859 (SONY)
IC2	8-741-126-20	s	BX1262 (SONY)
IC3	8-759-240-53	s	TC4069BPHB (TOSHIBA)
IC5	8-741-126-40	s	BX1264 (SONY)
IC6	8-752-006-10	s	CX20061 (SONY)
IC8	8-752-006-10	s	CX20061 (SONY)
IC9	8-749-938-90	s	BX389 (SONY)
IC10	8-752-006-10	s	CX20061 (SONY)
IC12	8-752-006-10	s	CX20061 (SONY)
IC13	8-752-006-10	s	CX20061 (SONY)
IC14	8-759-200-60	s	TA7060AP (TOSHIBA)
IC15	8-759-240-69	s	TC4069UBP (TOSHIBA)
IC16	8-750-000-46	s	CX872 (SONY)
IC17	8-752-006-10	s	CX20061 (SONY)
IC18	8-752-006-10	s	CX20061 (SONY)
IC19	8-759-240-01	s	TC4001BP (TOSHIBA)
IC20	8-759-240-01	s	TC4001BP (TOSHIBA)
L1	1-410-482-31	s	MICRO 100UH
L3	1-410-482-31	s	MICRO 100UH
L5	1-410-489-11	s	MICRO 390UH
L7	1-410-482-31	s	MICRO 100UH
L8	1-410-093-11	s	MICRO 33MMH
L9	1-410-482-31	s	MICRO 100UH
1) L17	1-408-413-00	s	MICRO 22UH
2) L17	1-410-478-11	s	MICRO 47UH
L18	1-410-471-11	s	MICRO 12UH
L19	1-410-482-31	s	MICRO 100UH
L23	1-410-494-11	s	MICRO 1MMH

Ref No.	Parts No.	SP	Description
1) L25	1-408-414-00	s	MICRO 27UH
2) L25	1-410-478-11	s	MICRO 47UH
L26	1-410-482-31	s	MICRO 100UH
L27	1-410-482-31	s	MICRO 100UH
L31	1-410-478-11	s	MICRO 47UH
L33	1-410-478-11	s	MICRO 47UH
L34	1-410-482-31	s	MICRO 100UH
L102	1-410-476-11	s	MICRO 33UH
L106	1-410-482-31	s	MICRO 100UH
2) L200	1-410-471-11	s	MICRO 12UH
2) L201	1-410-471-11	s	MICRO 12UH
LV1	1-407-572-00	s	VAR 33UH
LV2	1-425-982-00	s	VAR, BPT
LV3	1-411-106-00	s	VAR, TUNING
LV4	1-425-880-21	s	VAR, BURST AMP
Q3	8-729-201-05	s	2SC2878-B
Q4	8-729-100-67	s	2SC1623-L7
Q5	8-729-901-01	s	DTC144EK
Q6	8-729-901-01	s	DTC144EK
Q7	8-729-100-67	s	2SC1623-L7
Q8	8-729-100-67	s	2SC1623-L7
Q9	8-729-216-21	s	2SA1162Y
Q10	8-729-901-01	s	DTC144EK
Q11	8-729-901-01	s	DTC144EK
Q13	8-729-901-01	s	DTC144EK
Q14	8-729-901-01	s	DTC144EK
Q15	8-729-901-01	s	DTC144EK
Q19	8-729-201-05	s	2SC2878-B
Q20	8-729-100-67	s	2SC1623-L7
Q21	8-729-100-67	s	2SC1623-L7
Q22	8-729-201-05	s	2SC2878-B
Q23	8-729-201-05	s	2SC2878-B
Q24	8-729-216-21	s	2SA1162Y
Q25	8-729-201-05	s	2SC2878-B
Q26	8-729-100-67	s	2SC1623-L7
Q27	8-729-100-67	s	2SC1623-L7
Q29	8-729-201-05	s	2SC2878-B
Q30	8-729-201-05	s	2SC2878-B
Q34	8-729-100-67	s	2SC1623-L7
Q35	8-729-100-67	s	2SC1623-L7
Q36	8-729-100-67	s	2SC1623-L7
Q37	8-729-100-67	s	2SC1623-L7
Q38	8-729-201-05	s	2SC2878-B
Q39	8-729-201-05	s	2SC2878-B
Q40	8-729-100-67	s	2SC1623-L7
Q42	8-729-201-05	s	2SC2878-B
Q43	8-729-100-67	s	2SC1623-L7
Q46	8-729-100-67	s	2SC1623-L7
Q47	8-729-100-67	s	2SC1623-L7
Q48	8-729-100-67	s	2SC1623-L7
Q49	8-729-201-05	s	2SC2878-B
Q50	8-729-201-05	s	2SC2878-B
Q51	8-729-216-21	s	2SA1162Y
Q52	8-729-216-21	s	2SA1162Y
Q54	8-729-216-21	s	2SA1162Y

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
Q55	8-729-216-21	s	2SA1162Y
Q56	8-729-100-67	s	2SC1623-L7
Q57	8-729-100-67	s	2SC1623-L7
Q58	8-729-201-05	s	2SC2878-B
Q59	8-729-201-05	s	2SC2878-B
Q60	8-729-100-67	s	2SC1623-L7
Q61	8-729-201-05	s	2SC2878-B
Q62	8-729-201-05	s	2SC2878-B
Q63	8-729-201-05	s	2SC2878-B
Q64	8-729-100-67	s	2SC1623-L7
Q65	8-729-201-05	s	2SC2878-B
Q66	8-729-201-05	s	2SC2878-B
Q67	8-729-216-21	s	2SA1162Y
Q100	8-729-100-67	s	2SC1623-L7
Q101	8-729-100-67	s	2SC1623-L7
Q102	8-729-100-67	s	2SC1623-L7
Q103	8-729-901-01	s	DTC144EK
Q106	8-729-201-05	s	2SC2878-B
Q107	8-729-901-01	s	DTC144EK
Q108	8-729-100-67	s	2SC1623-L7
Q109	8-729-901-05	s	DTA124EK
Q110	8-729-901-01	s	DTC144EK
Q111	8-729-201-05	s	2SC2878-B
Q112	8-729-901-01	s	DTC144EK
Q113	8-729-201-05	s	2SC2878-B
Q114	8-729-901-01	s	DTC144EK
Q116	8-729-100-67	s	2SC1623-L7
Q117	8-729-901-01	s	DTC144EK
Q118	8-729-201-05	s	2SC2878-B
Q119	8-729-901-01	s	DTC144EK
Q120	8-729-100-67	s	2SC1623-L7
Q121	8-729-901-01	s	DTC144EK
Q122	8-729-901-01	s	DTC144EK
Q123	8-729-901-06	s	DTA144EK
Q124	8-729-901-01	s	DTC144EK
Q125	8-729-901-01	s	DTC144EK
Q126	8-729-100-67	s	2SC1623-L7
Q127	8-729-201-05	s	2SC2878-B
Q128	8-729-100-67	s	2SC1623-L7
Q129	8-729-901-01	s	DTC144EK
Q130	8-729-100-67	s	2SC1623-L7
Q131	8-729-901-01	s	DTC144EK
Q132	8-729-201-05	s	2SC2878-B
Q133	8-729-201-05	s	2SC2878-B
Q134	8-729-216-21	s	2SA1162Y
Q135	8-729-216-21	s	2SA1162Y
Q136	8-729-100-67	s	2SC1623-L7
Q137	8-729-201-05	s	2SC2878-B
Q138	8-729-901-01	s	DTC144EK
Q139	8-729-901-01	s	DTC144EK
Q140	8-729-901-01	s	DTC144EK
Q141	8-729-100-67	s	2SC1623-L7
Q142	8-729-901-01	s	DTC144EK
Q144	8-729-901-01	s	DTC144EK
Q145	8-729-216-21	s	2SA1162Y
Q146	8-729-100-67	s	2SC1623-L7
Q147	8-729-100-67	s	2SC1623-L7
Q148	8-729-100-67	s	2SC1623-L7
Q200	8-729-901-01	s	DTC144EK
Q201	8-729-201-05	s	2SC2878-B
Q202	8-729-901-01	s	DTC144EK

Ref No.	Parts No.	SP	Description
R173	1-247-849-00	s	CARBON 5.6k 5% 1/4W
RV3	1-228-989-00	s	VAR, CARBON 470
RV4	1-228-996-00	s	VAR, CARBON 47k
RV6	1-228-994-00	s	VAR, CARBON 10k
RV7	1-228-994-00	s	VAR, CARBON 10k
RV8	1-228-995-00	s	VAR, CARBON 22k
RV9	1-228-994-00	s	VAR, CARBON 10k
RV10	1-228-995-00	s	VAR, CARBON 22k
RV11	1-228-993-00	s	VAR, CARBON 4.7k
RV13	1-228-990-00	s	VAR, CARBON 1k
RV14	1-228-990-00	s	VAR, CARBON 1k
RV16	1-228-990-00	s	VAR, CARBON 1k
RV17	1-228-990-00	s	VAR, CARBON 1k
RV18	1-228-995-00	s	VAR, CARBON 22k
RV19	1-228-990-00	s	VAR, CARBON 1k
RV20	1-228-990-00	s	VAR, CARBON 1k
RV21	1-228-993-00	s	VAR, CARBON 4.7k
RV22	1-228-998-00	s	VAR, CARBON 220k
RV23	1-228-991-00	s	VAR, CARBON 2.2k
RV24	1-228-993-00	s	VAR, CARBON 4.7k
RV25	1-228-990-00	s	VAR, CARBON 1k
1) RV100	1-228-994-00	s	VAR, CARBON 10k
2) RV100	1-228-993-00	s	VAR, CARBON 4.7k
RV101	1-228-995-00	s	VAR, CARBON 22k
RV102	1-228-999-00	s	VAR, CARBON 470k
RV103	1-228-993-00	s	VAR, CARBON 4.7k
RV104	1-228-993-00	s	VAR, CARBON 4.7k
RV105	1-228-997-00	s	VAR, CARBON 100k
RV106	1-228-997-00	s	VAR, CARBON 100k
RV107	1-228-996-00	s	VAR, CARBON 47k
X1	1-527-231-22	s	CRYSTAL 4.433618 MHz

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Ref No.	Parts No.	SP	Description
CP-112 BOARD			
	A-6713-279-A	o	MOUNTED CIRCUIT BOARD, CP-112
C7	1-162-207-31	s	CERAMIC 22PF 5% 50V
C12	1-162-207-31	s	CERAMIC 22PF 5% 50V
C14	1-130-497-00	s	MYLAR 0.15 5% 50V
IC1	8-759-802-47	s	IC LA4500 (SANYO)
Q1	8-729-201-05	s	2SC2878-B
Q2	8-729-201-05	s	2SC2878-B
R1	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R2	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R5	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R6	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R17	1-247-775-00	s	CARBON 4.7 5% 1/4W
R18	1-247-775-00	s	CARBON 4.7 5% 1/4W
T1	1-423-261-11	s	INPUT
T2	1-423-261-11	s	INPUT
T3	1-427-586-11	s	INPUT/OUTPUT
T4	1-427-586-11	s	INPUT/OUTPUT
DC-31A BOARD			
	1-622-221-21	o	PRINTED CIRCUIT BOARD, DC-31A
	1-533-189-11	o	HOLDER, FUSE
	1-561-432-00	o	CONNECTOR CONTACT
	1-561-424-00	o	SOCKET, CONNECTOR 5P
C2	1-161-379-00	s	CERAMIC 0.01 20% 16V
CN005	1-562-738-11	o	HOUSING, CONNECTOR 5P
⚠F1	1-532-237-00	s	FUSE, TIME LAG 3.15A 250V
F2	1-532-286-00	s	FUSE, TIME LAG 2.5A 250V
IC1	8-759-938-15	s	IC BA178M05

Ref No.	Parts No.	SP	Description
DUS-92 BOARD			
	1-615-924-11	o	PRINTED CIRCUIT BOARD, DUS-92
H1003	8-825-578-21	s	ACE HEAD
DUS-147 BOARD			
	1-622-261-11	o	PRINTED CIRCUIT BOARD, DUS-147
EC-28 BOARD			
	1-622-223-11	o	PRINTED CIRCUIT BOARD, EC-28
H1002	8-825-513-20	s	CTL ERASE (EPP170-58)
HP-30 BOARD			
	1-622-220-11	o	PRINTED CIRCUIT BOARD, HP-30
CN1013	1-507-854-00	s	JACK, LARGE TYPE "HEADPHONES"
RV1001	1-237-703-11	s	VAR, CARBON 2k/2k "HEADPHONES LEVEL"
IF-132 BOARD			
5)	A-6717-450-A	o	MOUNTED CIRCUIT BOARD, IF-132
6)	A-6717-450-B	o	MOUNTED CIRCUIT BOARD, IF-132
C2	1-161-021-11	s	CERAMIC 0.047 10% 25V
C4	1-161-021-11	s	CERAMIC 0.047 10% 25V
C6	1-162-290-31	s	CERAMIC 470PF 10% 50V
C7	1-161-013-00	s	CERAMIC 0.01 10% 25V
C9	1-162-290-31	s	CERAMIC 470PF 10% 50V
5) C10	1-162-290-31	s	CERAMIC 470PF 10% 50V
C12	1-161-013-00	s	CERAMIC 0.01 10% 25V
C13	1-161-013-00	s	CERAMIC 0.01 10% 25V
C14	1-161-013-00	s	CERAMIC 0.01 10% 25V
C15	1-162-211-31	s	CERAMIC 33PF 5% 50V
C16	1-162-211-31	s	CERAMIC 33PF 5% 50V
C17	1-161-043-00	s	CERAMIC 0.0022 10% 25V
C18	1-161-379-00	s	CERAMIC 0.01 30% 16V
C19	1-161-379-00	s	CERAMIC 0.01 30% 16V
C20	1-161-379-00	s	CERAMIC 0.01 30% 16V
C21	1-161-379-00	s	CERAMIC 0.01 30% 16V
C22	1-161-379-00	s	CERAMIC 0.01 30% 16V
C23	1-161-379-00	s	CERAMIC 0.01 30% 16V
C24	1-161-379-00	s	CERAMIC 0.01 30% 16V
C26	1-162-294-31	s	CERAMIC 0.001 10% 50V

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Ref No.	Parts No.	SP	Description
CN1021	1-566-615-11	s	CONNECTOR, SQUARE 33P "REMOTE"
CN1022	1-562-900-11	s	JACK (SMALL TYPE) "RX DATA"
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-19	s	1SS119
D8	8-719-911-19	s	1SS119
D9	8-719-911-19	s	1SS119
D10	8-719-911-19	s	1SS119
D11	8-719-911-19	s	1SS119
D12	8-719-911-19	s	1SS119
D13	8-719-911-19	s	1SS119
D14	8-719-911-19	s	1SS119
D15	8-719-911-19	s	1SS119
D16	8-719-911-19	s	1SS119
5) D17	8-719-911-19	s	1SS119
5) D18	8-719-911-19	s	1SS119
D19	8-719-911-19	s	1SS119
D20	8-719-911-19	s	1SS119
D21	8-719-911-19	s	1SS119
5) D22	8-719-911-19	s	1SS119
6) D23	8-719-911-19	s	1SS119
6) D24	8-719-911-19	s	1SS119
6) D25	8-719-911-19	s	1SS119
6) D26	8-719-911-19	s	1SS119
IC1	8-759-600-61	s	M54529AP (MITSUBISHI)
IC2	8-759-600-61	s	M54529AP (MITSUBISHI)
IC3	8-759-600-61	s	M54529AP (MITSUBISHI)
IC4	8-759-600-61	s	M54529AP (MITSUBISHI)
IC5	8-759-345-38	s	HD14538BP (HITACHI)
IC6	8-759-207-73	s	TC4030BPHB (TOSHIBA)
IC7	8-759-240-69	s	TC4069UBP (TOSHIBA)
5) IC8	8-759-945-42	s	MB88505-548M (FUJITSU)
6) IC8	8-759-971-32	s	MB88525-189M (FUJITSU)
Q1	8-729-900-89	s	DTC144ES
Q2	8-729-900-89	s	DTC144ES
Q3	8-729-900-89	s	DTC144ES
Q4	8-729-900-89	s	DTC144ES
Q5	8-729-900-89	s	DTC144ES
R11	1-247-895-00	s	CARBON 470k 5% 1/4W
R37	1-247-887-00	s	CARBON 220k 5% 1/4W
R62	1-247-891-00	s	CARBON 330k 5% 1/4W
R73	1-247-887-00	s	CARBON 220k 5% 1/4W
X1	1-567-143-00	s	CERAMIC, 6MHz

Ref No.	Parts No.	SP	Description
KY-105C BOARD			
	A-6717-464-A	o	MOUNTED CIRCUIT BOARD, KY-105C
BT1	1-528-227-11	o	BATTERY, LITHIUM (CR-2032)
C1	1-162-211-31	s	CERAMIC 33PF 5% 50V
C2	1-162-211-31	s	CERAMIC 33PF 5% 50V
C4	1-161-021-11	s	CERAMIC 0.047 10% 25V
C7	1-162-286-31	s	CERAMIC 220PF 10% 50V
C8	1-162-286-31	s	CERAMIC 220PF 10% 50V
C9	1-162-286-31	s	CERAMIC 220PF 10% 50V
C10	1-162-286-31	s	CERAMIC 220PF 10% 50V
C11	1-162-286-31	s	CERAMIC 220PF 10% 50V
C12	1-161-021-11	s	CERAMIC 0.047 10% 25V
C13	1-125-443-11	s	ELECT 0.047 5.5V
CP1	1-560-914-00	s	CONNECTOR POST 2P
CS1	1-561-724-00	s	CONNECTOR SOCKET 2P
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-19	s	1SS119
D8	8-719-904-55	s	GL-5HD5
D10	8-719-911-19	s	1SS119
D11	8-719-802-11	s	TLUG154
D12	8-719-911-19	s	1SS119
D13	8-719-911-19	s	1SS119
D14	8-719-911-19	s	1SS119
D15	8-719-911-19	s	1SS119
D16	8-719-904-55	s	GL-5HD5
D17	8-719-911-19	s	1SS119
D18	8-719-904-55	s	GL-5HD5
D19	8-719-904-55	s	GL-5HD5
D20	8-719-911-19	s	1SS119
D21	8-719-904-55	s	GL-5HD5
D22	8-719-911-19	s	1SS119
D23	8-719-911-19	s	1SS119
D24	8-719-911-19	s	1SS119
D25	8-719-904-55	s	GL-5HD5
D26	8-719-911-19	s	1SS119
D27	8-719-802-11	s	TLUG154
D28	8-719-802-24	s	TLUY154
D29	8-719-802-24	s	TLUY154
D30	8-719-802-24	s	TLUY154
D31	8-719-802-11	s	TLUG154
D32	8-719-911-19	s	1SS119
D33	8-719-911-19	s	1SS119
D34	8-719-911-19	s	1SS119

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Ref No.	Parts No.	SP	Description
IC1	8-759-645-17	s	M54517P (MITSUBISHI)
IC2	8-759-970-95	s	MB88525-191M (FUJITSU)
IC3	8-759-240-42	s	TC4042BP (TOSHIBA)
L1	1-407-488-00	s	470uH
ND701	1-807-441-21	s	LED BLOCK
Q1	8-729-900-65	s	DTA144ES
Q2	8-729-900-65	s	DTA144ES
Q3	8-729-900-65	s	DTA144ES
Q4	8-729-900-65	s	DTA144ES
Q5	8-729-900-65	s	DTA144ES
Q6	8-729-900-65	s	DTA144ES
Q7	8-729-117-54	s	2SA1175
Q8	8-729-117-54	s	2SA1175
Q9	8-729-117-54	s	2SA1175
Q10	8-729-117-54	s	2SA1175
Q11	8-729-117-54	s	2SA1175
Q13	8-729-117-54	s	2SA1175
Q14	8-729-117-54	s	2SA1175
Q16	8-729-900-65	s	DTA144ES
Q17	8-729-900-65	s	DTA144ES
Q18	8-729-900-65	s	DTA144ES
Q19	8-729-900-65	s	DTA144ES
Q20	8-729-900-65	s	DTA144ES
Q21	8-729-900-65	s	DTA144ES
Q22	8-729-900-65	s	DTA144ES
Q23	8-729-900-65	s	DTA144ES
Q24	8-729-900-65	s	DTA144ES
Q30	8-729-900-36	s	DTC124ES
R75	1-247-736-11	s	CARBON 56 5% 1/2W
S1	1-570-145-11	s	LEVER SLIDE "FRAME/CTL"
S2	1-553-739-21	s	KEY "RESET"
S4	1-553-739-21	s	KEY "MARK A"
S5	1-553-739-21	s	KEY "MARK B"
S6	1-552-539-00	s	KEY "SEARCH"
S7	1-516-995-00	s	LEVER SLIDE "PROGRAM OPERATION"
S8	1-552-539-00	s	KEY "PAUSE"
S9	1-552-539-00	s	KEY "DUB"
S10	1-552-539-00	s	KEY "FF"
S11	1-552-539-00	s	KEY "REC"
S12	1-552-539-00	s	KEY "PLAY"
S13	1-552-539-00	s	KEY "REW"
S14	1-552-539-00	s	KEY "EJECT"
S15	1-552-539-00	s	KEY "STOP"
S16	1-571-116-11	s	LEVER SLIDE "TBC"
S17	1-516-995-00	s	LEVER SLIDE "INPUT"
S18	1-516-298-00	s	LEVER SLIDE "AUDIO MONITOR"
S19	1-571-116-11	s	LEVER SLIDE "DOLBY NR"
X1	1-567-143-00	s	CERAMIC, 6MHz

Ref No.	Parts No.	SP	Description
LM-13 BOARD			
	1-618-600-11	o	PRINTED CIRCUIT BOARD, LM-13
C1	1-130-471-00	s	PE TEREPHTHALATE 0.001 5% 50V
C2	1-130-471-00	s	PE TEREPHTHALATE 0.001 5% 50V
M1003	1-541-376-11	s	DC (DNR-4700A) "THREADING"
LP-41 BOARD			
	1-623-101-11	o	PRINTED CIRCUIT BOARD, LP-41
D1	8-719-800-89	s	TLY255
D2	8-719-800-89	s	TLY255
D3	8-719-800-89	s	TLY255
R1	1-247-706-11	s	CARBON 330 5% 1/4W
R2	1-247-706-11	s	CARBON 330 5% 1/4W
R3	1-247-706-11	s	CARBON 330 5% 1/4W
MC-28 BOARD			
	1-622-222-11	o	PRINTED CIRCUIT BOARD, MC-28
C1	1-161-379-00	s	CERAMIC 10000PF
C2	1-161-379-00	s	CERAMIC 10000PF
CN1019	1-563-988-11	s	JACK, LARGE TYPE 2P "MICROPHONES CH-1"
CN1020	1-563-988-11	s	JACK, LARGE TYPE 2P "MICROPHONES CH-2"

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

MT-29 BOARD

Ref No.	Parts No.	SP	Description
	1-622-219-11	o	PRINTED CIRCUIT BOARD, MT-29
D1	8-719-812-32	s	TLY123
D2	8-719-812-32	s	TLY123
D3	8-719-812-32	s	TLY123
D4	8-719-812-32	s	TLY123
D5	8-719-812-32	s	TLY123
D6	8-719-812-32	s	TLY123
RV1002	1-237-701-11	s	VAR, CARBON 5k "CH-1 REC"
RV1003	1-237-701-11	s	VAR, CARBON 5k "CH-2 REC"
RV1004	1-237-702-11	s	VAR, CARBON 100k "TRACKING"
S1003	1-553-003-00	s	LEVER SLIDE "AUDIO LIMITER"

PD-40 BOARD

Ref No.	Parts No.	SP	Description
	A-6725-569-A	o	MOUNTED CIRCUIT BOARD, PD-40
D1	8-719-200-02	s	10E-2
D2	8-719-200-02	s	10E-2
D3	8-719-200-02	s	10E-2
D4	8-719-200-02	s	10E-2
D5	8-719-200-02	s	10E-2
D6	8-719-200-02	s	10E-2
D7	8-719-200-02	s	10E-2
D8	8-719-200-02	s	10E-2
D9	8-719-200-02	s	10E-2
D10	8-719-200-02	s	10E-2
D11	8-719-200-02	s	10E-2
D12	8-719-200-02	s	10E-2
D13	8-719-200-02	s	10E-2
Q1	8-729-811-11	s	2SD1111
Q2	8-729-178-55	s	2SC2785-E
Q3	8-729-889-40	s	2SD894
Q4	8-729-811-11	s	2SD1111
Q5	8-729-178-55	s	2SC2785-E
Q6	8-729-889-40	s	2SD894
Q7	8-729-889-40	s	2SD894
Q8	8-729-811-11	s	2SD1111
Q9	8-729-178-55	s	2SC2785-E
Q10	8-729-889-40	s	2SD894
Q11	8-729-811-11	s	2SD1111
Q12	8-729-178-55	s	2SC2785-E
Q13	8-729-178-55	s	2SC2785-E
Q14	8-729-889-40	s	2SD894
⚠R6	1-532-685-00	s	LINK, IC
R12	1-532-685-00	s	LINK, IC
R19	1-532-685-00	s	LINK, IC
R25	1-532-685-00	s	LINK, IC
R30	1-532-685-00	s	LINK, IC

PD-41 BOARD

Ref No.	Parts No.	SP	Description
	A-6725-570-A	o	MOUNTED CIRCUIT BOARD, PD-41
D1	8-719-200-02	s	10E-2
D2	8-719-200-02	s	10E-2
D3	8-719-200-02	s	10E-2
D4	8-719-200-02	s	10E-2
D5	8-719-200-02	s	10E-2
D6	8-719-200-02	s	10E-2
Q1	8-729-811-11	s	2SD1111
Q2	8-729-178-55	s	2SC2785-E
Q3	8-729-889-40	s	2SD894
Q4	8-729-811-11	s	2SD1111
Q5	8-729-178-55	s	2SC2785-E
Q6	8-729-889-40	s	2SD894
⚠R6	1-532-685-00	s	LINK, IC
R12	1-532-685-00	s	LINK, IC

PH-5 BOARD

Ref No.	Parts No.	SP	Description
	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5
D1	8-719-951-04	s	BR5104S
Q1	8-729-810-22	s	SPS102

PT-9 BOARD

Ref No.	Parts No.	SP	Description
	1-605-018-00	o	PRINTED CIRCUIT BOARD, PT-9
Q1	8-729-377-13	s	2SA771-Y

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

PTC-30 BOARD

Ref No.	Parts No.	SP	Description
	1-622-260-11	o	PRINTED CIRCUIT BOARD, PTC-30
IC1	8-719-939-50	s	GP1L52
IC3	8-719-939-50	s	GP1L52

PTC-33 BOARD

Ref No.	Parts No.	SP	Description
	1-622-258-11	o	PRINTED CIRCUIT BOARD, PTC-33
IC1	8-719-940-86	s	GP1L53 "THREAD END DET"
IC2	8-719-940-86	s	GP1L53 "UNTHREAD END DET"

PTC-34 BOARD

Ref No.	Parts No.	SP	Description
	1-622-259-11	o	PRINTED CIRCUIT BOARD, PTC-34
IC1	8-719-940-86	s	GP1L53 "FR UNTHREAD END DET"

PTC-35 BOARD

Ref No.	Parts No.	SP	Description
	1-622-218-11	o	PRINTED CIRCUIT BOARD, PTC-35
IC1A	8-719-940-86	s	GP1L53 "TAKE-UP ROTATION DET"
IC1B	8-719-940-86	s	GP1L53 "SUPPLY ROTATION DET"

RM-39 BOARD

Ref No.	Parts No.	SP	Description
	1-618-873-11	o	PRINTED CIRCUIT BOARD, RM-39
C1	1-101-006-00	s	CERAMIC 0.047 50V
C2	1-101-006-00	s	CERAMIC 0.047 50V
L1	1-410-623-11	s	4.7uH
L2	1-410-623-11	s	4.7uH
M1006	8-835-178-01	s	DC FN30-T26N1E "REEL"

RP-35 BOARD

Ref No.	Parts No.	SP	Description
	A-6711-862-A	o	MOUNTED CIRCUIT BOARD, RP-35
C2	1-124-236-00	s	ELECT 47 20% 16V
C3	1-161-021-11	s	CERAMIC 0.047 10% 25V
C4	1-161-021-11	s	CERAMIC 0.047 10% 25V
C7	1-161-021-11	s	CERAMIC 0.047 10% 25V
C8	1-161-021-11	s	CERAMIC 0.047 10% 25V
C9	1-124-236-00	s	ELECT 47 20% 16V
C10	1-161-021-11	s	CERAMIC 0.047 10% 25V
C11	1-124-236-00	s	ELECT 47 20% 16V
C12	1-161-021-11	s	CERAMIC 0.047 10% 25V
C14	1-124-255-00	s	ELECT 1 20% 50V
C15	1-161-021-11	s	CERAMIC 0.047 10% 25V
C16	1-161-021-11	s	CERAMIC 0.047 10% 25V
C17	1-124-236-00	s	ELECT 47 20% 16V
C20	1-124-255-00	s	ELECT 1 20% 50V
CP1	1-560-914-00	s	POST, 2P
CP2	1-560-914-00	s	POST, 2P
CS1	1-561-724-00	o	SOCKET, 2P
CS2	1-561-724-00	o	SOCKET, 2P
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-100-13	s	RD2.7EB2
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-100-41	s	RD6.8E-B2
IC1	8-743-731-00	s	BX373A (SONY)
IC2	8-729-677-14	s	2SC2771
IC3	8-749-901-08	s	BX1265 (SONY)
IC4	8-759-240-09	s	TC4009UBP (TOSHIBA)
IC5	8-729-677-14	s	2SC2771
IC6	8-749-901-08	s	BX1265 (SONY)
L1	1-410-482-31	s	MICRO 100UH
L3	1-410-482-31	s	MICRO 100UH
L4	1-410-482-31	s	MICRO 100UH
Q1	8-729-201-05	s	2SC2878-B
Q2	8-729-201-05	s	2SC2878-B
Q3	8-729-600-24	s	2SC403SP
Q5	8-729-600-24	s	2SC403SP
Q6	8-729-201-05	s	2SC2878-B
Q7	8-729-201-05	s	2SC2878-B
Q8	8-729-900-89	s	DTC144ES
Q9	8-729-900-89	s	DTC144ES
Q10	8-729-900-89	s	DTC144ES

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Ref No.	Parts No.	SP	Description
RV1	1-228-990-00	s	VAR, CARBON 1k
RV2	1-228-990-00	s	VAR, CARBON 1k
RV3	1-228-993-00	s	VAR, CARBON 4.7k
RV4	1-228-991-00	s	VAR, CARBON 2.2k
RV5	1-228-993-00	s	VAR, CARBON 4.7k
RV6	1-228-991-00	s	VAR, CARBON 2.2k
RV7	1-228-990-00	s	VAR, CARBON 1k
RV8	1-228-990-00	s	VAR, CARBON 1k
T1	1-426-017-00	s	AF
T2	1-426-172-11	s	HF
T3	1-426-319-11	s	PB RF
T4	1-426-172-11	s	HF
T5	1-426-319-11	s	PB RF

SE-46 BOARD

Ref No.	Parts No.	SP	Description
	1-618-599-11	o	PRINTED CIRCUIT BOARD, SE-46
PC1	1-806-232-21	s	DETECTOR MB-1102/S.N

SV-93C BOARD

Ref No.	Parts No.	SP	Description
	⚠ A-6715-374-A	o	MOUNTED CIRCUIT BOARD, SV-93C
C3	1-124-499-11	s	ELECT 1 20% 50V
C6	1-161-377-00	s	CERAMIC 0.0047 30% 16V
C7	1-161-374-11	s	CERAMIC 0.0015 30% 16V
C8	1-130-493-00	s	MYLAR 0.068 5% 50V
C10	1-131-352-00	s	TANTALUM 6.8 10% 35V
C12	1-162-299-21	s	CERAMIC 0.0068 30% 16V
C14	1-161-021-11	s	CERAMIC 0.047 10% 25V
C17	1-161-057-00	s	CERAMIC 0.033 10% 25V
C18	1-161-013-00	s	CERAMIC 0.01 10% 25V
C19	1-161-013-00	s	CERAMIC 0.01 10% 25V
C104	1-162-215-31	s	CERAMIC 47PF 5% 50V
C106	1-161-047-00	s	CERAMIC 0.0047 10% 25V
C111	1-161-042-00	s	CERAMIC 0.0018 10% 25V
C112	1-161-042-00	s	CERAMIC 0.0018 10% 25V
C116	1-162-286-31	s	CERAMIC 220PF 10% 50V
C120	1-162-288-31	s	CERAMIC 330PF 10% 50V
C203	1-162-211-31	s	CERAMIC 33PF 5% 50V
C204	1-162-211-31	s	CERAMIC 33PF 5% 50V
C301	1-161-013-00	s	CERAMIC 0.01 10% 25V
C302	1-161-040-00	s	CERAMIC 0.0012 10% 25V
C303	1-130-483-00	s	MYLAR 0.01 5% 50V
C306	1-162-286-31	s	CERAMIC 220PF 10% 50V
C307	1-162-288-31	s	CERAMIC 330PF 10% 50V
C308	1-161-013-00	s	CERAMIC 0.01 10% 25V
C309	1-161-013-00	s	CERAMIC 0.01 10% 25V
C312	1-124-499-11	s	ELECT 1 20% 50V
C409	1-161-379-00	s	CERAMIC 0.01 30% 16V
C410	1-161-379-00	s	CERAMIC 0.01 30% 16V
C411	1-162-207-31	s	CERAMIC 22PF 5% 50V
C412	1-162-282-31	s	CERAMIC 100PF 10% 50V
C413	1-162-284-31	s	CERAMIC 150PF 10% 50V
C418	1-162-282-31	s	CERAMIC 100PF 10% 50V
C422	1-124-464-11	s	ELECT 0.22 20% 50V
C423	1-162-289-31	s	CERAMIC 390PF 10% 50V
C430	1-124-463-00	s	ELECT 0.1 20% 50V
C433	1-124-499-11	s	ELECT 1 20% 50V
C507	1-162-286-31	s	CERAMIC 220PF 10% 50V
C702	1-161-379-00	s	CERAMIC 0.01 30% 16V
C703	1-161-379-00	s	CERAMIC 0.01 30% 16V
C704	1-161-379-00	s	CERAMIC 0.01 30% 16V
C705	1-161-379-00	s	CERAMIC 0.01 30% 16V
C709	1-161-379-00	s	CERAMIC 0.01 30% 16V
C710	1-161-379-00	s	CERAMIC 0.01 30% 16V
C711	1-161-379-00	s	CERAMIC 0.01 30% 16V
C712	1-161-379-00	s	CERAMIC 0.01 30% 16V
C714	1-161-379-00	s	CERAMIC 0.01 30% 16V
C716	1-161-379-00	s	CERAMIC 0.01 30% 16V
C718	1-161-379-00	s	CERAMIC 0.01 30% 16V
C719	1-161-039-00	s	CERAMIC 0.001 10% 25V
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-55	s	U05G
D101	8-719-911-19	s	1SS119
D103	8-719-911-19	s	1SS119
D104	8-719-911-19	s	1SS119
D105	8-719-911-19	s	1SS119
D106	8-719-911-19	s	1SS119
D107	8-719-911-19	s	1SS119
D108	8-719-911-19	s	1SS119
D109	8-719-911-19	s	1SS119
D110	8-719-911-19	s	1SS119
D111	8-719-911-19	s	1SS119
D112	8-719-911-19	s	1SS119
D113	8-719-911-19	s	1SS119
D202	8-719-911-19	s	1SS119
D204	8-719-911-19	s	1SS119
D205	8-719-911-19	s	1SS119
D206	8-719-911-19	s	1SS119
D207	8-719-911-19	s	1SS119
D208	8-719-911-19	s	1SS119
D210	8-719-100-15	s	RD3.0E-B2
D211	8-719-911-19	s	1SS119
D301	8-719-911-19	s	1SS119
D302	8-719-911-19	s	1SS119
D303	8-719-911-19	s	1SS119

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Ref No.	Parts No.	SP	Description
D401	8-719-911-19	s	1SS119
D402	8-719-911-19	s	1SS119
D403	8-719-911-19	s	1SS119
D404	8-719-911-19	s	1SS119
D405	8-719-911-19	s	1SS119
D406	8-719-911-19	s	1SS119
D407	8-719-911-19	s	1SS119
D408	8-719-911-19	s	1SS119
D409	8-719-911-19	s	1SS119
D410	8-719-911-19	s	1SS119
D411	8-719-911-19	s	1SS119
D412	8-719-911-19	s	1SS119
D501	8-719-911-19	s	1SS119
D600	8-719-911-19	s	1SS119
IC1	8-759-132-40	s	UPC324C (NEC)
IC2	8-759-700-08	s	NJM4558S (JRC)
IC3	8-759-705-58	s	NJM4558D-D (JRC)
IC4	8-759-240-81	s	TC4081BP (TOSHIBA)
IC5	8-759-140-53	s	UPD4053BC (NEC)
IC8	8-759-132-40	s	UPC324C (NEC)
IC9	8-759-132-40	s	UPC324C (NEC)
IC10	8-759-133-90	s	UPC339C (NEC)
IC11	8-759-240-30	s	TC4030BP (TOSHIBA)
IC12	8-759-135-80	s	UPC358C (NEC)
IC13	8-759-140-53	s	UPD4053BC (NEC)
IC14	8-759-205-76	s	TC504013BP (TOSHIBA)
IC15	8-759-200-01	s	TC4001UBP (TOSHIBA)
IC16	8-759-140-53	s	UPD4053BC (NEC)
IC17	8-751-941-05	s	CX-194B-5 (SONY)
IC18	8-759-945-41	s	MB88505-547M (FUJITSU)
IC19	8-759-240-30	s	TC4030BP (TOSHIBA)
IC20	8-759-140-53	s	UPD4053BC (NEC)
IC21	8-743-915-10	s	BX-3915A (SONY)
IC22	8-759-135-80	s	UPC358C (NEC)
Q1	8-729-178-55	s	2SC2785-E
Q2	8-729-117-54	s	2SA1175-K
Q3	8-729-376-84	s	2SA768-G
Q4	8-729-804-91	s	2SD1682-S
Q5	8-729-177-43	s	2SD774-4
Q101	8-729-900-83	s	DTC124XS
Q102	8-729-178-55	s	2SC2785-E
Q103	8-729-900-83	s	DTC124XS
Q104	8-729-117-54	s	2SA1175-K
Q106	8-729-178-55	s	2SC2785-E
Q107	8-729-105-72	s	2SK523-L1
Q108	8-729-900-83	s	DTC124XS
Q109	8-729-900-89	s	DTC144ES
Q110	8-729-178-55	s	2SC2785-E
Q111	8-729-376-84	s	2SA768-G
Q112	8-729-117-54	s	2SA1175-K
Q113	8-729-804-91	s	2SD1682-S
Q114	8-729-900-67	s	DTA124XS
Q201	8-729-900-83	s	DTC124XS
Q202	8-729-900-83	s	DTC124XS

Ref No.	Parts No.	SP	Description
Q203	8-729-900-83	s	DTC124XS
Q204	8-729-900-83	s	DTC124XS
Q205	8-729-900-83	s	DTC124XS
Q206	8-729-900-83	s	DTC124XS
Q301	8-729-178-55	s	2SC2785-E
Q302	8-729-178-55	s	2SC2785-E
Q303	8-729-178-55	s	2SC2785-E
Q304	8-729-178-55	s	2SC2785-E
Q305	8-729-900-83	s	DTC124XS
Q401	8-729-178-55	s	2SC2785
Q403	8-729-178-55	s	2SC2785
Q404	8-729-178-55	s	2SC2785
Q408	8-729-600-24	s	2SC403-51
Q410	8-729-900-67	s	DTA124XS
Q411	8-729-178-55	s	2SC2785-E
Q412	8-729-178-55	s	2SC2785-E
Q413	8-729-900-83	s	DTC124XS
R12	1-247-895-00	s	CARBON 470k 5% 1/4W
R13	1-247-881-00	s	CARBON 120k 5% 1/4W
R16	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R17	1-247-895-00	s	CARBON 470k 5% 1/4W
R36	1-247-887-00	s	CARBON 220k 5% 1/4W
⚠R42	1-207-621-00	s	WIREWOUND 1.5 10% 3W
R125	1-247-887-00	s	CARBON 220k 5% 1/4W
R147	1-247-895-00	s	CARBON 470k 5% 1/4W
R151	1-247-891-00	s	CARBON 330k 5% 1/4W
R162	1-247-895-00	s	CARBON 470k 5% 1/4W
R172	1-247-891-00	s	CARBON 330k 5% 1/4W
R176	1-247-887-00	s	CARBON 220k 5% 1/4W
R178	1-247-895-00	s	CARBON 470k 5% 1/4W
R260	1-247-895-00	s	CARBON 470k 5% 1/4W
R306	1-247-895-00	s	CARBON 470k 5% 1/4W
R311	1-247-895-00	s	CARBON 470k 5% 1/4W
R326	1-247-883-00	s	CARBON 150k 5% 1/4W
⚠R461	1-207-636-00	s	WIREWOUND 100 10% 3W
R507	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R600	1-532-685-00	s	LINK IC
RV1	1-228-994-00	s	VAR, METAL GLAZE 10k
RV2	1-228-990-00	s	VAR, CARBON 1k
RV100	1-228-994-00	s	VAR, METAL GLAZE 10k
RV101	1-228-994-00	s	VAR, METAL GLAZE 10k
RV102	1-228-994-00	s	VAR, METAL GLAZE 10k
RV106	1-228-993-00	s	VAR, CARBON 4.7k
RV107	1-228-995-00	s	vAR, CARBON 22k
RV201	1-228-990-00	s	VAR, CARBON 1k
RV402	1-228-996-00	s	VAR, CARBON 47k
RV404	1-228-996-00	s	VAR, CARBON 47k
RV405	1-228-996-00	s	VAR, CARBON 47k
RV406	1-228-997-00	s	VAR, CARBON 100k
X1	1-527-345-00	s	CRYSTAL 4.43MHz
X2	1-527-734-00	s	CRYSTAL 6MHz

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

SY-106 BOARD

Ref No.	Parts No.	SP	Description
⚠3)	A-6717-448-A	o	MOUNTED CIRCUIT BOARD, SY-106
4)	A-6717-448-B	o	MOUNTED CIRCUIT BOARD, SY-106
C2	1-161-021-11	s	CERAMIC 0.047 10% 25V
C3	1-161-013-00	s	CERAMIC 0.01 10% 25V
C4	1-161-041-00	s	CERAMIC 0.0015 10% 25V
C5	1-161-013-00	s	CERAMIC 0.01 10% 25V
C6	1-161-055-00	s	CERAMIC 0.022 10% 25V
C10	1-162-286-31	s	CERAMIC 220PF 10% 50V
C11	1-124-499-11	s	ELECT 1 20% 50V
C14	1-162-286-31	s	CERAMIC 220PF 10% 50V
C15	1-161-020-11	s	CERAMIC 0.039 10% 25V
C17	1-124-499-11	s	ELECT 1 20% 50V
C18	1-131-358-00	s	TANTALUM 6.8 10% 25V
C19	1-161-013-00	s	CERAMIC 0.01 10% 25V
C20	1-161-057-00	s	CERAMIC 0.033 10% 25V
C21	1-161-013-00	s	CERAMIC 0.01 10% 25V
C22	1-162-216-31	s	CERAMIC 51PF 5% 50V
C23	1-124-499-11	s	ELECT 1 20% 50V
C24	1-161-021-11	s	CERAMIC 0.047 10% 25V
C30	1-124-499-11	s	ELECT 1 20% 50V
C31	1-161-039-00	s	CERAMIC 0.001 10% 25V
C32	1-162-211-31	s	CERAMIC 33PF 5% 50V
C33	1-161-021-11	s	CERAMIC 0.047 10% 25V
C34	1-161-039-00	s	CERAMIC 0.001 10% 25V
C36	1-161-021-11	s	CERAMIC 0.047 10% 25V
C37	1-162-211-31	s	CERAMIC 33PF 5% 50V
C38	1-161-055-00	s	CERAMIC 0.022 10% 25V
C42	1-161-021-11	s	CERAMIC 0.047 10% 25V
C46	1-162-290-31	s	CERAMIC 470PF 10% 50V
C47	1-162-210-31	s	CERAMIC 30PF 5% 50V
C48	1-162-210-31	s	CERAMIC 30PF 5% 50V
C49	1-124-499-11	s	ELECT 1 20% 50V
C50	1-124-499-11	s	ELECT 1 20% 50V
C55	1-162-290-31	s	CERAMIC 470PF 10% 50V
CN505	1-506-815-11	o	HOUSING, BOARD IN CONNECTOR 6P
	1-563-180-11	o	HOUSING, CONNECTOR 6P
CN507	1-506-821-11	o	HOUSING, BOARD IN CONNECTOR 12P
	1-563-186-11	o	HOUSING, CONNECTOR 12P
CN508	1-506-821-11	o	HOUSING, BOARD IN CONNECTOR 12P
	1-563-186-11	o	HOUSING, CONNECTOR 12P
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-19	s	1SS119
D8	8-719-911-19	s	1SS119
D9	8-719-911-19	s	1SS119
D10	8-719-911-19	s	1SS119
D11	8-719-911-19	s	1SS119
D12	8-719-911-19	s	1SS119
D13	8-719-911-19	s	1SS119
D14	8-719-911-19	s	1SS119
D15	8-719-911-19	s	1SS119
D16	8-719-911-19	s	1SS119
D17	8-719-911-19	s	1SS119
D18	8-719-911-19	s	1SS119
D20	8-719-911-19	s	1SS119
D21	8-719-911-55	s	U05-G
D22	8-719-911-55	s	U05-G
D23	8-719-911-55	s	U05-G
D24	8-719-911-19	s	1SS119
D25	8-719-911-19	s	1SS119
D26	8-719-911-19	s	1SS119
3) D30	8-719-911-19	s	1SS119
D31	8-719-911-19	s	1SS119
D32	8-719-911-19	s	1SS119
D33	8-719-911-19	s	1SS119
3) D41	8-719-911-19	s	1SS119
3) D42	8-719-911-19	s	1SS119
D43	8-719-101-97	s	1SS97-1
IC1	8-759-145-58	s	UPC4558C (NEC)
IC2	8-759-145-58	s	UPC4558C (NEC)
IC3	8-759-345-38	s	HD14538BP (HITACHI)
IC4	8-759-135-80	s	UPC358C (NEC)
IC5	8-759-145-58	s	UPC4558C (NEC)
IC6	8-759-240-69	s	TC4069UBP (TOSHIBA)
3) IC7	8-759-945-39	s	MB88525-177M (FUJITSU)
4) IC7	8-759-970-94	s	MB88525-184M (FUJITSU)
IC8	8-759-729-03	s	NJM2903D (JRC)
IC9	8-759-600-24	s	M54543L (MITSUBISHI)
IC10	8-759-600-24	s	M54543L (MITSUBISHI)
IC11	8-759-240-69	s	TC4069UBP (TOSHIBA)
IC12	8-759-945-43	s	MB88505-549M (FUJITSU)
IC13	8-759-220-00	s	TC40H000P (TOSHIBA)
IC14	8-759-913-99	s	MB88201-173N (FUJITSU)
IC15	8-759-729-03	s	NJM2903D (JRC)
IC17	8-759-240-01	s	TC4001BP (TOSHIBA)
IC18	8-759-240-69	s	TC4069UBP (TOSHIBA)
IC19	8-759-345-38	s	HD14538BP (HITACHI)
IC20	8-759-202-55	s	TC74HC244P (TOSHIBA)
Q1	8-729-177-43	s	2SD774-4
Q3	8-729-889-40	s	2SD894
Q4	8-729-178-55	s	2SC2785-E
Q5	8-729-178-55	s	2SC2785-E
Q6	8-729-178-55	s	2SC2785-E
Q7	8-729-178-55	s	2SC2785-E
Q8	8-729-178-55	s	2SC2785-E
Q9	8-729-900-89	s	DTC144ES
Q10	8-729-117-54	s	2SA1175-K
Q11	8-729-900-89	s	DTC144ES
Q12	8-729-175-54	s	2SA1175-K
Q13	8-729-900-89	s	DTC144ES
Q14	8-729-900-89	s	DTC144ES
Q15	8-729-178-55	s	2SC2785-E
Q16	8-729-178-55	s	2SC2785-E

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Ref No.	Parts No.	SP	Description
Q17	8-729-900-89	s	DTC144ES
Q18	8-729-900-89	s	DTC144ES
Q19	8-729-900-89	s	DTC144ES
Q20	8-729-178-55	s	2SC2785-E
Q21	8-729-900-89	s	DTC144ES
Q22	8-729-900-89	s	DTC144ES
Q23	8-729-900-89	s	DTC144ES
Q24	8-729-900-89	s	DTC144ES
Q25	8-729-900-89	s	DTC144ES
Q26	8-729-178-55	s	2SC2785-E
Q27	8-729-178-55	s	2SC2785-E
Q28	8-729-117-54	s	2SA1175-K
Q29	8-729-178-55	s	2SC2785-E
Q30	8-729-900-89	s	DTC144ES
Q31	8-729-178-55	s	2SC2785-E
Q32	8-729-900-89	s	DTC144ES
Q33	8-729-900-89	s	DTC144ES
Q34	8-729-900-89	s	DTC144ES
Q35	8-729-398-62	s	2SC1986
Q36	8-729-900-89	s	DTC144ES
Q37	8-729-900-89	s	DTC144ES
Q38	8-729-900-89	s	DTC144ES
Q39	8-729-900-89	s	DTC144ES
Q40	8-729-900-89	s	DTC144ES
Q41	8-729-900-89	s	DTC144ES
Q42	8-729-900-89	s	DTC144ES
Q43	8-729-900-89	s	DTC144ES
Q44	8-729-811-11	s	2SD1111
⚠R11	1-207-674-00	s	WIREWOUND 4.7 10% 6W
R13	1-247-895-00	s	CARBON 470k 5% 1/4W
R24	1-247-895-00	s	CARBON 470k 5% 1/4W
R32	1-247-891-00	s	CARBON 330k 5% 1/4W
R33	1-247-883-00	s	CARBON 150k 5% 1/4W
R38	1-247-891-00	s	CARBON 330k 5% 1/4W
R40	1-247-887-00	s	CARBON 220k 5% 1/4W
R41	1-247-701-11	s	CARBON 120 5% 1/4W
R47	1-247-881-00	s	CARBON 120k 5% 1/4W
R48	1-247-881-00	s	CARBON 120k 5% 1/4W
R76	1-247-887-00	s	CARBON 220k 5% 1/4W
R85	1-247-887-00	s	CARBON 220k 5% 1/4W
R112	1-246-449-25	s	CARBON 100 5% 1/4W
R159	1-214-853-00	s	METAL 360 1% 1/2W
R160	1-214-852-00	s	METAL 330 1% 1/2W
R189	1-247-887-00	s	CARBON 220k 5% 1/4W
R192	1-532-637-00	s	LINK, IC
R201	1-532-605-00	s	LINK, IC
R204	1-532-637-00	s	LINK, IC
R300	1-532-769-21	s	FUSE, MICRO 0.2A
RV1	1-230-722-11	s	VAR, CARBON 22k
RV2	1-230-720-11	s	VAR, CARBON 4.7k
RV3	1-230-720-11	s	VAR, CARBON 4.7k
RV4	1-230-722-11	s	VAR, CARBON 22k

Ref No.	Parts No.	SP	Description
SW1	1-552-509-00	s	DIP
X1	1-567-143-00	s	CERAMIC 6MHz
X2	1-567-192-11	s	CERAMIC 4MHz

TG-22 BOARD

	1-618-597-11	o	PRINTED CIRCUIT BOARD, TG-22
D1	8-719-904-55	s	GL-5HD5

UR-14E BOARD

	⚠1-413-249-12	s	SWITCHING REGULATOR, UR-14E
⚠C101	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C102	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C103	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C104	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C105	1-136-185-00	s	METALIZED 0.22 20% 250V
C106	1-136-185-00	s	METALIZED 0.22 20% 250V
C107	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C108	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C109	1-124-961-00	s	ELECT 220 20% 200V
C110	1-124-023-00	s	ELECT 4.7 20% 350V
C111	1-124-023-00	s	ELECT 4.7 20% 350V
C112	1-124-549-00	s	ELECT 100 20% 10V
C113	1-124-961-00	s	ELECT 220 20% 200V
C114	1-124-549-00	s	ELECT 100 20% 10V
C201	1-106-351-00	s	MYLAR 0.0022 5% 200V
C202	1-106-351-00	s	MYLAR 0.0022 5% 200V
C203	1-161-825-11	s	CERAMIC 220PF 10% 500V
C204	1-161-825-11	s	CERAMIC 220PF 10% 500V
C205	1-161-825-11	s	CERAMIC 220PF 10% 500V
C206	1-161-825-11	s	CERAMIC 220PF 10% 500V
C207	1-123-357-00	s	ELECT 22 20% 50V
C209	1-106-351-00	s	MYLAR 0.0022 5% 200V
C210	1-136-153-00	s	MYLAR 0.01 5% 50V
C211	1-106-351-00	s	MYLAR 0.0022 5% 200V
C212	1-124-556-00	s	ELECT 2200 20% 16V
C213	1-124-556-00	s	ELECT 2200 20% 16V
C214	1-124-556-00	s	ELECT 2200 20% 16V
C215	1-124-556-00	s	ELECT 2200 20% 16V
C216	1-123-326-00	s	ELECT 3300 20% 16V
C217	1-123-332-00	s	ELECT 47 20% 50V
C651	1-124-445-00	s	ELECT 100 20% 16V
C652	1-130-591-11	s	MYLAR 3300PF 2% 100V
C653	1-136-141-00	s	MYLAR 1000PF 10% 50V
C654	1-136-165-00	s	MYLAR 0.1 5% 50V
C655	1-123-318-00	s	ELECT 33 16V

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Ref No.	Parts No.	SP	Description
⚠CN101	1-560-436-00	o	REEPTACLE, 3P
	1-561-218-11	o	HOUSING, 3P
	1-561-432-00	o	CONTACT
CN201	1-560-438-00	o	RECEPTACLE, 5P
	1-561-424-11	o	HOUSING, 5P
	1-561-432-00	o	CONTACT
D101	8-719-300-00	s	LB-156
D201	8-719-908-00	s	ESAC33-02CS
D202	8-719-908-00	s	ESAC33-02CS
D203	8-719-900-93	s	V09C
D204	8-719-900-93	s	V09C
D205	8-719-815-55	s	1S1555
D206	8-719-100-61	s	RD11EB2
D208	8-719-101-67	s	RD7.5EL2
D209	8-719-100-30	s	RD5.1EB2
D210	8-719-100-30	s	RD5.1EB2
D651	8-719-200-02	s	10E-2
D652	8-719-100-70	s	RD15EB1
D653	8-719-815-55	s	1S1555
FB101	1-543-060-00	s	CORE
FB102	1-543-060-00	s	CORE
FB201	1-543-060-00	s	CORE
FB202	1-543-060-00	s	CORE
FB203	1-543-060-00	s	CORE
FB204	1-543-060-00	s	CORE
FB205	1-543-060-00	s	CORE
FB206	1-543-060-00	s	CORE
FB207	1-543-060-00	s	CORE
FB208	1-543-060-00	s	CORE
IC651	8-759-937-00	s	MB3759 (FUJITSU)
⚠L101	1-421-848-11	s	LINE FILTER
L201	1-421-849-11	s	CHOKE, 2.4mH
L203	1-408-316-00	s	CHOKE
L204	1-421-850-11	s	CHOKE, 12
L205	1-421-329-00	s	CHOKE
Q101	8-729-901-72	s	2SC3317
Q102	8-729-901-72	s	2SC3317
Q103	8-729-100-13	s	2SC2001
Q104	8-729-100-13	s	2SC2001
Q201	8-729-606-34	s	2SC2603-G
Q202	8-729-117-54	s	2SA1175-F

Ref No.	Parts No.	SP	Description
R101	1-214-947-00	s	METAL 2.7M 1% 1/2W
⚠R102	1-205-636-11	s	CEMENT 3.3 5% 5W
R103	1-246-529-00	s	CARBON 220k 5% 1/4W
R104	1-246-529-00	s	CARBON 220k 5% 1/4W
⚠R105	1-212-934-00	s	METAL 1 5% 1/2W
R106	1-247-700-11	s	NF CARBON 100 5% 1/4W
R107	1-246-529-00	s	CARBON 220k 5% 1/4W
R108	1-246-529-00	s	CARBON 220k 5% 1/4W
⚠R109	1-212-934-00	s	METAL 1 5% 1/2W
R110	1-247-700-11	s	NF CARBON 100 5% 1/4W
⚠R201	1-206-475-00	s	METAL 33 5% 2W
R202	1-535-369-00	s	SHUNT
⚠R203	1-213-151-00	s	METAL 4.7k 5% 5W
R204	1-247-713-11	s	NF CARBON 1k 5% 1/4W
R205	1-247-719-11	s	NF CARBON 3.3k 5% 1/4W
R206	1-249-455-11	s	NF CARBON 4.7k 5% 1/4W
R207	1-247-717-11	s	NF CARBON 2.2k 5% 1/4W
R208	1-247-123-00	s	NF CARBON 470 5% 1/4W
R209	1-247-704-11	s	NF CARBON 220 5% 1/4W
R212	1-247-857-00	s	NF CARBON 220 5% 1/2W
R651	1-249-425-11	s	NF CARBON 4.7k 5% 1/6W
RV651	1-228-644-00	s	VAR, METAL 1k 0.3W
⚠T101	1-448-423-11	s	CONVERTER
T102	1-437-120-00	s	DRIVE

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Ref No.	Parts No.	SP	Description
VO-17 BOARD			
	A-6711-836-A	o	MOUNTED CIRCUIT BOARD, VO-17
C2	1-124-236-00	s	ELECT 47 20% 16V
C11	1-109-633-00	s	MICA 470PF 1% 500V
C15	1-124-236-00	s	ELECT 47 20% 16V
C17	1-124-236-00	s	ELECT 47 20% 16V
C19	1-124-236-00	s	ELECT 47 20% 16V
C23	1-124-236-00	s	ELECT 47 20% 16V
C25	1-124-584-00	s	ELECT 100 20% 10V
C26	1-124-225-00	s	ELECT 100 20% 6.3V
C27	1-124-462-00	s	ELECT 10 20% 16V
C28	1-124-584-00	s	ELECT 100 20% 10V
C35	1-124-462-00	s	ELECT 10 20% 16V
C36	1-124-462-00	s	ELECT 10 20% 16V
C38	1-109-633-00	s	MICA 470PF 1% 500V
C42	1-124-462-00	s	ELECT 10 20% 16V
C43	1-124-462-00	s	ELECT 10 20% 16V
1) C45	1-163-141-00	s	CHIP CERAMIC 0.001 5% 50V
2) C45	1-162-763-11	s	CERAMIC 680PF 5% 50V
C46	1-163-081-00	s	CERAMIC CHIP 0.22 25V
C48	1-124-225-00	s	ELECT 100 20% 6.3V
C49	1-163-081-00	s	CERAMIC CHIP 0.22 25V
C51	1-124-584-00	s	ELECT 100 20% 10V
C53	1-124-462-00	s	ELECT 10 20% 10V
C55	1-124-462-00	s	ELECT 10 20% 10V
C56	1-124-462-00	s	ELECT 10 20% 10V
C57	1-124-236-00	s	ELECT 47 20% 10V
C58	1-124-236-00	s	ELECT 47 20% 16V
C70	1-124-236-00	s	ELECT 47 20% 16V
C71	1-124-236-00	s	ELECT 47 20% 16V
C73	1-124-236-00	s	ELECT 47 20% 16V
C76	1-124-584-00	s	ELECT 100 20% 10V
C77	1-124-236-00	s	ELECT 47 20% 16V
C78	1-124-584-00	s	ELECT 100 20% 10V
C85	1-124-584-00	s	ELECT 100 20% 10V
C94	1-124-248-00	s	ELECT 22 20% 25V
C96	1-124-255-00	s	ELECT 1 20% 50V
C97	1-124-236-00	s	ELECT 47 20% 16V
C98	1-124-236-00	s	ELECT 47 20% 16V
C99	1-163-081-00	s	CERAMIC CHIP 0.22 25V
C104	1-124-236-00	s	ELECT 47 20% 16V
C105	1-124-236-00	s	ELECT 47 20% 16V
1) C106	1-124-462-00	s	ELECT 10 20% 16V
2) C106	1-124-584-00	s	ELECT 100 20% 10V
C107	1-124-584-00	s	ELECT 100 20% 10V
C108	1-124-462-00	s	ELECT 10 20% 10V
C109	1-124-462-00	s	ELECT 10 20% 10V
C114	1-163-033-00	s	CERAMIC CHIP 0.022 10% 25V
C115	1-124-236-00	s	ELECT 47 20% 10V
C116	1-124-462-00	s	ELECT 10 20% 16V
C117	1-124-236-00	s	ELECT 47 20% 10V
C118	1-163-081-00	s	CERAMIC CHIP 0.22 25V
C119	1-124-462-00	s	ELECT 10 20% 16V
C120	1-124-236-00	s	ELECT 47 20% 16V
C122	1-124-255-00	s	ELECT 1 20% 50V
C123	1-124-584-00	s	ELECT 100 20% 10V
C126	1-124-584-00	s	ELECT 100 20% 10V
C127	1-124-236-00	s	ELECT 47 20% 10V
C128	1-124-236-00	s	ELECT 47 20% 16V

Ref No.	Parts No.	SP	Description
C131	1-124-236-00	s	ELECT 47 20% 16V
C132	1-124-236-00	s	ELECT 47 20% 16V
C133	1-163-033-00	s	CERAMIC CHIP 0.022 10% 25V
C142	1-124-236-00	s	ELECT 47 20% 16V
C154	1-124-236-00	s	ELECT 47 20% 16V
C157	1-124-225-00	s	ELECT 100 20% 6.3V
C164	1-124-584-00	s	ELECT 100 20% 10V
C165	1-124-584-00	s	ELECT 100 20% 10V
C166	1-124-584-00	s	ELECT 100 20% 10V
C167	1-124-462-00	s	ELECT 10 20% 16V
C168	1-124-584-00	s	ELECT 100 20% 10V
C172	1-163-033-00	s	CERAMIC CHIP 0.022 10% 25V
C173	1-162-290-31	s	CERAMIC 470PF 10% 50V
C178	1-124-236-00	s	ELECT 47 20% 16V
C186	1-124-236-00	s	ELECT 47 20% 16V
C188	1-124-236-00	s	ELECT 47 20% 16V
C189	1-124-255-00	s	ELECT 1 20% 50V
C194	1-124-236-00	s	ELECT 47 20% 16V
C196	1-124-236-00	s	ELECT 47 20% 16V
C199	1-124-236-00	s	ELECT 47 20% 16V
C223	1-124-236-00	s	ELECT 47 20% 16V
C225	1-124-245-00	s	ELECT 4.7 20% 16V
1) C226	1-163-141-00	s	CHIP CERAMIC 0.001 5% 50V
2) C226	1-162-763-11	s	CERAMIC 680PF 5% 50V
C227	1-124-236-00	s	ELECT 47 20% 16V
C228	1-124-236-00	s	ELECT 47 20% 16V
C500	1-124-462-00	s	ELECT 10 20% 16V
1) C503	1-162-283-31	s	CERAMIC 120PF 10% 50V
2) C503	1-107-164-00	s	MICA 51PF 5% 50V
C509	1-124-462-00	s	ELECT 10 20% 10V
C511	1-124-236-00	s	ELECT 47 20% 16V
C515	1-124-236-00	s	ELECT 47 20% 16V
C516	1-124-236-00	s	ELECT 47 20% 10V
C517	1-163-081-00	s	CERAMIC CHIP 0.22 25V
C525	1-124-584-00	s	ELECT 100 20% 10V
C527	1-124-584-00	s	ELECT 100 20% 10V
C530	1-124-236-00	s	ELECT 47 20% 10V
C532	1-124-584-00	s	ELECT 100 20% 10V
C536	1-124-462-00	s	ELECT 10 20% 10V
C537	1-124-584-00	s	ELECT 100 20% 10V
C601	1-163-033-00	s	CERAMIC CHIP 0.022 10% 25V
C614	1-162-286-31	s	CERAMIC 220PF 10% 50V
C615	1-124-462-00	s	ELECT 10 20% 10V
C619	1-124-462-00	s	ELECT 10 20% 10V
C620	1-124-462-00	s	ELECT 10 20% 10V
C621	1-124-245-00	s	ELECT 4.7 20% 16V
C626	1-124-236-00	s	ELECT 47 20% 16V
C628	1-124-584-00	s	ELECT 100 20% 10V
C629	1-124-224-00	s	ELECT 47 20% 6.3V
C630	1-131-341-00	s	TANTALUM 0.1 10% 35V
C631	1-126-101-11	s	ELECT 100 20% 16V
C632	1-124-234-00	s	ELECT 22 20% 16V
C633	1-124-234-00	s	ELECT 22 20% 16V
C635	1-124-584-00	s	ELECT 100 20% 10V
C636	1-163-033-00	s	CERAMIC CHIP 0.022 10% 25V
C639	1-124-236-00	s	ELECT 47 20% 16V
C646	1-124-255-00	s	ELECT 1 20% 50V
C700	1-124-222-00	s	ELECT 22 20% 6.3V

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
CN1002	1-563-356-11	s	CONNECTOR, MULTI 8P "TV"
CN1003	1-563-354-11	s	BNC, "VIDEO OUT-1"
CN1004	1-563-354-11	s	BNC, "VIDEO OUT-2"
CN1005	1-563-354-11	s	BNC, "RF OFF TAPE OUT"
CN1006	1-563-354-11	s	BNC, "VIDEO IN"
CN1007	1-563-354-11	s	BNC, "EXT SYNC IN"
CN1009	1-563-989-11	s	JACK, PIN (RCA) 1P "AUDIO MONITOR"
CN1023	1-508-945-00	s	CONNECTOR (R-M) "DUB IN"
CN1024	1-561-045-00	s	CONNECTOR (R-F) "DUB OUT"
CP1	1-560-914-00	s	POST, 2P
CS1	1-561-724-00	o	SOCKET, 2P
CV1	1-141-227-00	s	CERAMIC TRIMMER
D2	8-719-100-05	s	1S2837
D3	8-719-100-03	s	1S2835
D4	8-719-100-21	s	RD3.9EB2
D7	8-719-104-10	s	1SS99
D10	8-719-100-03	s	1S2835
D19	8-719-104-10	s	1SS99
D20	8-719-104-10	s	1SS99
D21	8-719-100-05	s	1S2837
D22	8-719-100-03	s	1S2835
D24	8-719-100-03	s	1S2835
D27	8-719-101-97	s	1SS97-1
D28	8-719-101-97	s	1SS97-1
D29	8-719-104-10	s	1SS99
D53	8-719-100-05	s	1S2837
D100	8-719-100-05	s	1S2837
D101	8-719-100-21	s	RD3.9EB2
D102	8-719-100-05	s	1S2837
D103	8-719-100-05	s	1S2837
D104	8-719-100-05	s	1S2837
D105	8-719-100-03	s	1S2835
D108	8-719-100-05	s	1S2837
D109	8-719-100-03	s	1S2835
D110	8-719-100-03	s	1S2835
D111	8-719-100-03	s	1S2835
D112	8-719-100-03	s	1S2835
D113	8-719-100-05	s	1S2837
D114	8-719-100-03	s	1S2835
D115	8-719-100-05	s	1S2837
D116	8-719-100-05	s	1S2837
D117	8-719-100-03	s	1S2835
D120	8-719-100-21	s	RD3.9EB2
D130	8-719-100-21	s	RD3.9EB2
D131	8-719-104-10	s	1SS99
D132	8-719-104-10	s	1SS99
D133	8-719-104-10	s	1SS99
D134	8-719-104-10	s	1SS99
D135	8-719-815-59	s	1SS1555-S
2) D136	8-719-100-05	s	1S2837
D200	8-719-104-10	s	1SS99

Ref No.	Parts No.	SP	Description
DL1	1-415-544-11	s	DELAY LINE
DL2	1-415-154-00	s	DELAY LINE 35ns
DL3	1-415-162-21	s	DELAY LINE 50ns
DL4	1-415-404-11	s	DELAY LINE
DL5	1-415-404-11	s	DELAY LINE
DL6	1-415-544-11	s	DELAY LINE
FL1	1-231-580-21	s	HIGH PASS
FL2	1-235-477-11	s	HIGH PASS
FL4	1-236-039-11	s	LOW PASS
FL5	1-236-037-11	s	LOW PASS
FL6	1-235-469-11	s	LOW PASS
FL7	1-235-473-11	s	LOW PASS
FL8	1-235-478-11	s	HIGH PASS
FL9	1-231-581-21	s	HIGH PASS
FL10	1-236-029-11	s	BAND PASS
FL12	1-235-009-21	s	HIGH PASS
FL14	1-409-410-11	s	TRAP
IC1	8-752-006-10	s	CX20061 (SONY)
IC2	8-759-206-29	s	TA7060AP-SONY
IC3	8-759-240-53	s	TC4053BPHB (TOSHIBA)
IC4	8-759-400-06	s	AN608P (MATSUSHITA)
IC5	8-749-938-90	s	BX389 (SONY)
IC6	8-759-601-87	s	CX187 (SONY)
IC7	8-752-200-60	s	TA7060AP (TOSHIBA)
IC8	8-759-240-69	s	TC4069UBP (TOSHIBA)
IC10	8-743-880-00	s	BX388 (SONY)
IC12	8-759-207-38	s	TA7374P (TOSHIBA)
IC13	8-752-321-89	s	CXL5003P
IC14	8-759-708-09	s	NJM78L09A (JRC)
IC15	8-752-200-60	s	TA7060AP (TOSHIBA)
IC16	8-759-708-05	s	NJM78L05A (JRC)
IC17	8-741-114-00	s	BX1140 (SONY)
IC18	8-759-927-56	s	BA7021
IC19	8-743-880-00	s	BX388 (SONY)
IC20	8-752-201-30	s	CX22013 (SONY)
IC21	8-749-938-90	s	BX389 (SONY)
IC22	8-752-030-30	s	CXA1020P (SONY)
IC23	8-749-938-90	s	BX389 (SONY)
IC24	8-759-240-52	s	TC4052BP (TOSHIBA)
IC25	8-759-208-17	s	TC4528BPHB (TOSHIBA)
IC26	8-749-900-59	s	BX1448L (ROHM)
IC27	8-749-900-68	s	BX1447L (ROHM)
IC28	8-759-240-53	s	TC4053BPHB (TOSHIBA)
IC29	8-752-200-60	s	TA7060AP (TOSHIBA)
IC30	8-749-938-90	s	BX389 (SONY)
IC31	8-751-340-10	s	CX134A (SONY)
IC32	8-759-400-06	s	AN608P (MATSUSHITA)
IC34	8-752-006-10	s	CX20061 (SONY)
IC36	8-752-006-10	s	CX20061 (SONY)
IC37	8-752-006-10	s	CX20061 (SONY)
IC38	8-752-200-60	s	TA7060AP (TOSHIBA)

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Ref No.	Parts No.	SP	Description
L1	1-410-482-31	s	MICRO 100UH
L4	1-410-468-11	s	MICRO 6.8UH
L5	1-410-482-31	s	MICRO 100UH
L7	1-410-482-31	s	MICRO 100UH
L8	1-410-482-31	s	MICRO 100UH
L9	1-410-482-31	s	MICRO 100UH
L17	1-410-087-31	s	MICRO 10MMH
L18	1-410-482-31	s	MICRO 100UH
L19	1-410-482-31	s	MICRO 100UH
L23	1-410-482-31	s	MICRO 100UH
L24	1-410-482-31	s	MICRO 100UH
L29	1-410-482-31	s	MICRO 100UH
L30	1-410-482-31	s	MICRO 100UH
L31	1-410-482-31	s	MICRO 100UH
L32	1-410-466-41	s	MICRO 4.7UH
L33	1-410-482-31	s	MICRO 100UH
L38	1-410-482-31	s	MICRO 100UH
L40	1-410-482-31	s	MICRO 100UH
L41	1-410-482-31	s	MICRO 100UH
L43	1-410-494-11	s	MICRO 1MMH
L48	1-410-473-11	s	MICRO 18UH
L49	1-410-087-31	s	MICRO 10MMH
L50	1-410-471-11	s	MICRO 12UH
L51	1-410-471-11	s	MICRO 12UH
L52	1-410-087-31	s	MICRO 10MMH
L100	1-410-468-11	s	MICRO 6.8UH
L102	1-410-468-11	s	MICRO 6.8UH
L104	1-410-478-11	s	MICRO 47UH
L105	1-410-482-31	s	MICRO 100UH
L106	1-410-471-11	s	MICRO 12UH
L114	1-410-471-11	s	MICRO 12UH
L116	1-410-087-31	s	MICRO 10MMH
L117	1-410-087-31	s	MICRO 10MMH
L118	1-410-478-11	s	MICRO 47UH
LV1	1-407-565-00	s	COIL 2.2UH
LV2	1-407-268-00	s	MICRO 1.5MMH
Q1	8-729-216-21	s	2SA1162Y
Q4	8-729-100-67	s	2SC1623-L7
Q5	8-729-100-67	s	2SC1623-L7
Q6	8-729-100-67	s	2SC1623-L7
Q7	8-729-100-67	s	2SC1623-L7
Q8	8-729-201-05	s	2SC2878-B
Q9	8-729-100-67	s	2SC1623-L7
Q10	8-729-100-67	s	2SC1623-L7
Q11	8-729-216-21	s	2SA1162Y
Q12	8-729-100-67	s	2SC1623-L7
Q13	8-729-201-05	s	2SC2878-B
Q14	8-729-100-67	s	2SC1623-L7
Q15	8-729-100-67	s	2SC1623-L7
Q17	8-729-100-67	s	2SC1623-L7
Q18	8-729-384-48	s	2SA844
Q19	8-729-384-48	s	2SA844
Q20	8-729-216-21	s	2SA1162Y
Q21	8-729-201-05	s	2SC2878-B
Q22	8-729-216-21	s	2SA1162Y
Q23	8-729-201-05	s	2SC2878-B

Ref No.	Parts No.	SP	Description
Q24	8-729-201-05	s	2SC2878-B
Q25	8-729-100-67	s	2SC1623-L7
Q26	8-729-100-67	s	2SC1623-L7
Q27	8-729-201-05	s	2SC2878-B
Q28	8-729-201-05	s	2SC2878-B
Q29	8-729-100-67	s	2SC1623-L7
Q30	8-729-100-67	s	2SC1623-L7
Q31	8-729-100-67	s	2SC1623-L7
Q32	8-729-100-67	s	2SC1623-L7
Q35	8-729-100-67	s	2SC1623-L7
Q36	8-729-100-67	s	2SC1623-L7
Q40	8-729-100-67	s	2SC1623-L7
Q41	8-729-216-21	s	2SA1162Y
Q42	8-729-100-67	s	2SC1623-L7
Q43	8-729-216-21	s	2SA1162Y
Q44	8-729-100-67	s	2SC1623-L7
Q46	8-729-100-67	s	2SC1623-L7
Q47	8-729-100-67	s	2SC1623-L7
Q48	8-729-100-67	s	2SC1623-L7
Q49	8-729-100-67	s	2SC1623-L7
Q50	8-729-100-67	s	2SC1623-L7
Q51	8-729-201-05	s	2SC2878-B
Q52	8-729-901-01	s	DTC144EK
Q53	8-729-216-21	s	2SA1162Y
Q55	8-729-100-67	s	2SC1623-L7
Q56	8-729-100-67	s	2SC1623-L7
Q57	8-729-100-67	s	2SC1623-L7
Q58	8-729-100-67	s	2SC1623-L7
Q59	8-729-100-67	s	2SC1623-L7
Q60	8-729-102-69	s	2SC2757-T34
Q61	8-729-102-69	s	2SC2757-T34
Q62	8-729-122-63	s	2SA1226
Q63	8-729-122-63	s	2SA1226
Q64	8-729-102-69	s	2SC2757-T34
Q65	8-729-122-63	s	2SA1226
Q66	8-729-122-63	s	2SA1226
Q67	8-729-102-69	s	2SC2757-T34
Q68	8-729-102-69	s	2SC2757-T34
Q69	8-729-122-63	s	2SA1226
Q70	8-729-100-67	s	2SC1623-L7
Q73	8-729-100-67	s	2SC1623-L7
Q74	8-729-100-67	s	2SC1623-L7
Q75	8-729-201-05	s	2SC2878-B
Q78	8-729-100-67	s	2SC1623-L7
Q79	8-729-100-67	s	2SC1623-L7
Q80	8-729-100-67	s	2SC1623-L7
Q81	8-729-100-67	s	2SC1623-L7
Q82	8-729-201-05	s	2SC2878-B
Q83	8-729-901-01	s	DTC144EK
Q84	8-729-901-01	s	DTC144EK
Q85	8-729-113-33	s	2SB733-4
Q89	8-729-100-67	s	2SC1623-L7
Q90	8-729-100-67	s	2SC1623-L7
Q91	8-729-100-67	s	2SC1623-L7
Q92	8-729-100-67	s	2SC1623-L7
Q93	8-729-100-67	s	2SC1623-L7
Q94	8-729-216-21	s	2SA1162Y
Q95	8-729-100-67	s	2SC1623-L7
Q96	8-729-100-67	s	2SC1623-L7
Q97	8-729-801-72	s	2SC2603-E

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
Q98	8-729-100-67	s	2SC1623-L7
Q99	8-729-100-67	s	2SC1623-L7
Q100	8-729-201-05	s	2SC2878-B
Q101	8-729-901-01	s	DTC144EK
Q105	8-729-216-21	s	2SA1162Y
Q106	8-729-100-67	s	2SC1623-L7
Q107	8-729-600-24	s	2SC403SP
Q108	8-729-901-01	s	DTC144EK
Q109	8-729-901-01	s	DTC144EK
Q110	8-729-901-01	s	DTC144EK
Q111	8-729-113-33	s	2SB733-4
Q112	8-729-216-21	s	2SA1162Y
Q113	8-729-216-21	s	2SA1162Y
Q114	8-729-100-67	s	2SC1623-L7
Q115	8-729-100-67	s	2SC1623-L7
Q116	8-729-901-01	s	DTC144EK
Q117	8-729-901-01	s	DTC144EK
Q118	8-729-216-21	s	2SA1162Y
Q119	8-729-216-21	s	2SA1162Y
Q120	8-729-216-21	s	2SA1162Y
Q121	8-729-201-05	s	2SC2878-B
Q122	8-729-901-01	s	DTC144EK
Q123	8-729-901-01	s	DTC144EK
Q124	8-729-201-05	s	2SC2878-B
Q125	8-729-901-01	s	DTC144EK
Q127	8-729-901-01	s	DTC144EK
Q128	8-729-901-01	s	DTC144EK
Q130	8-729-901-01	s	DTC144EK
Q131	8-729-901-01	s	DTC144EK
Q202	8-729-100-67	s	2SC1623-L7
Q203	8-729-901-01	s	DTC144EK
Q205	8-729-100-67	s	2SC1623-L7
Q206	8-729-901-01	s	DTC144EK
Q207	8-729-100-67	s	2SC1623-L7
Q208	8-729-901-01	s	DTC144EK
Q209	8-729-901-01	s	DTC144EK
Q210	8-729-901-01	s	DTC144EK
Q211	8-729-216-21	s	2SA1162Y
Q212	8-729-901-01	s	DTC144EK
Q213	8-729-901-01	s	DTC144EK
Q278	8-729-216-21	s	2SA1162Y
Q279	8-729-100-67	s	2SC1623-L7
Q280	8-729-100-67	s	2SC1623-L7
Q281	8-729-216-21	s	2SA1162Y
Q282	8-729-901-01	s	DTC144EK
Q283	8-729-100-67	s	2SC1623-L7
Q284	8-729-100-67	s	2SC1623-L7
Q285	8-729-100-67	s	2SC1623-L7
Q286	8-729-100-67	s	2SC1623-L7
Q287	8-729-100-67	s	2SC1623-L7
Q288	8-729-901-01	s	DTC144EK
Q289	8-729-201-05	s	2SC2878-B
Q290	8-729-201-05	s	2SC2878-B
1) Q291	8-729-901-01	s	DTC144EK
Q292	8-729-100-67	s	2SC1623-L7
Q293	8-729-901-01	s	DTC144EK
Q294	8-729-901-01	s	DTC144EK
Q295	8-729-901-01	s	DTC144EK
Q296	8-729-901-01	s	DTC144EK
2) Q297	8-729-901-06	s	DTA144EK
2) Q298	8-729-901-01	s	DTC144EK
Q300	8-729-901-01	s	DTC144EK

Ref No.	Parts No.	SP	Description
R370	1-249-457-11	s	CARBON 6.8 5% 1/4W
R535	1-247-710-11	s	CARBON 560 5% 1/4W
R629	1-247-710-11	s	CARBON 560 5% 1/4W
RV2	1-228-990-00	s	VAR, CARBON 1k
RV3	1-228-990-00	s	VAR, CARBON 1k
RV4	1-228-990-00	s	VAR, CARBON 1k
RV6	1-228-991-00	s	VAR, CARBON 2.2k
RV8	1-228-996-00	s	VAR, CARBON 47k
RV9	1-228-993-00	s	VAR, CARBON 4.7k
RV10	1-228-994-00	s	VAR, CARBON 10k
RV11	1-228-993-00	s	VAR, CARBON 4.7k
RV14	1-228-994-00	s	VAR, CARBON 10k
RV15	1-228-990-00	s	VAR, CARBON 1k
RV16	1-228-990-00	s	VAR, CARBON 1k
RV17	1-228-991-00	s	VAR, CARBON 2.2k
RV20	1-228-990-00	s	VAR, CARBON 1k
RV21	1-228-990-00	s	VAR, CARBON 1k
RV22	1-228-990-00	s	VAR, CARBON 1k
RV23	1-228-994-00	s	VAR, CARBON 10k
RV24	1-228-995-00	s	VAR, CARBON 22k
RV25	1-228-990-00	s	VAR, CARBON 1k
RV26	1-228-991-00	s	VAR, CARBON 2.2k
RV27	1-228-990-00	s	VAR, CARBON 1k
RV28	1-228-994-00	s	VAR, CARBON 10k
RV29	1-228-989-00	s	VAR, CARBON 470
RV30	1-228-989-00	s	VAR, CARBON 470
RV31	1-228-989-00	s	VAR, CARBON 470
RV34	1-228-997-00	s	VAR, CARBON 100k
RV35	1-228-993-00	s	VAR, CARBON 4.7k
RV36	1-228-991-00	s	VAR, CARBON 2.2k
RV37	1-228-990-00	s	VAR, CARBON 1k
RV38	1-228-991-00	s	VAR, CARBON 2.2k
RV39	1-228-991-00	s	VAR, CARBON 2.2k
1) RV40	1-228-990-00	s	VAR, CARBON 1k
2) RV40	1-228-991-00	s	VAR, CARBON 2.2k
1) RV41	1-228-990-00	s	VAR, CARBON 1k
2) RV41	1-228-991-00	s	VAR, CARBON 2.2k
RV103	1-228-996-00	s	VAR, CARBON 47k
RV104	1-228-993-00	s	VAR, CARBON 4.7k
RV105	1-228-995-00	s	VAR, CARBON 22k
RV106	1-228-994-00	s	VAR, CARBON 10k
RV107	1-228-990-00	s	VAR, CARBON 1k
RV108	1-228-990-00	s	VAR, CARBON 1k
RV109	1-228-991-00	s	VAR, CARBON 2.2k
RV110	1-228-996-00	s	VAR, CARBON 47k
S1	1-552-509-00	s	DIP
S1004	1-516-781-XX	s	SLIDE SWITCH "COLOR LOCK"

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Ref No.	Parts No.	SP	Description
FRAME			
	A-6709-606-A	s	HEAD DRUM ASSY DUH-42A-R
	A-6709-601-A	s	UPPER DRUM ASSY DUR-42-R
	⚠1-413-249-12	s	SWITCHING REGULATOR UR-14E
	1-464-801-12	s	ENCODER, ROTARY
⚠CN1001	1-509-546-00	s	3P INLET
CN1004	1-563-355-11	s	JACK "REMOTE"
CN1011	1-560-403-00	s	RECEPTACLE 10P "RF MOD"
CN1012	1-555-977-00	s	RECEPTACLE "RF OUT"
CN1015	1-563-029-21	s	CONNECTOR XLR 3P FEMALE "AUDIO LINE IN CH-1"
CN1016	1-563-029-21	s	CONNECTOR XLR 3P FEMALE "AUDIO LINE IN CH-2"
CN1017	1-563-030-21	s	CONNECTOR XLR 3P MALE "AUDIO LINE OUT CH-1"
CN1016	1-563-030-21	s	CONNECTOR XLR 3P MALE "AUDIO LINE OUT CH-2"
CN1002	1-563-356-11	s	CONNECTOR, MULTI 8P "TV"
CN1003	1-563-354-11	o	BNC "VIDEO OUT-1"
CN1004	1-563-354-11	o	BNC "VIDEO OUT-2"
CN1005	1-563-354-11	o	BNC "RF OFF TAPE OUT"
CN1006	1-563-354-11	o	BNC "VUDEO IN"
CN1007	1-563-354-11	o	BNC "EXT SYNC IN"
CN1009	1-563-989-11	s	JACK, PIN (RCA) 1P "AUDIO MONITOR"
CN1023	1-508-945-00	s	CONNECTOR (R-M) "DUB IN"
CN1024	1-561-045-00	s	CONNECTOR (R-F) "DUB OUT"
CS1001	1-586-633-00	s	CONDENSATION SENSOR
PM1001	1-454-415-11	s	SOLENOID, PLUNGER 12V 9.5/52 OHM "TAKE-UP IDLER"
PM1002	1-454-417-31	s	SOLENOID, PLUNGER 12V 12/90 OHM "TAKE-UP BRAKE"
PM1004	1-454-415-11	s	SOLENOID, PLUNGER 12V 9.5/52 OHM "SUPPLY IDLER"
PM1005	1-454-417-31	s	SOLENOID, PLUNGER 12V 12/90 OHM "SUPPLY BRAKE"
PM1006	1-454-446-11	s	SOLENOID, PLUNGER 12V 80 OHM "SKEW"
PM1007	1-454-417-31	s	SOLENOID, PLUNGER 12V 12/90 OHM "SEARCH"
PM1008	1-454-416-31	s	SOLENOID, PLUNGER 12V, 7/35 OHM "PINCH"
M1001	8-835-258-01	s	DC, BHF-1915B "CAPSTAN"
M1005	8-835-179-01	s	DC, MCB2B15 "CASSETTE COMPARTMENT"
M1006	8-835-178-01	s	DC FN30-T26N1E "REEL"

Ref No.	Parts No.	SP	Description
ME1001	1-520-393-00	s	METER, AUDIO
ME1002	1-520-393-00	s	METER, AUDIO
RV1001	1-237-703-11	s	VAR, CARBON 2k/2k "HEADPHONES LEVEL"
RV1002	1-237-701-11	s	VAR, CARBON 5k "CH-1 REC"
RV1003	1-237-701-11	s	VAR, CARBON 5k "CH-2 REC"
RV1004	1-237-702-11	s	VAR, CARBON 100k "TRACKING"
⚠S1001	1-570-117-11	s	SWITCH, ROCKER "AC POWER"
	1-509-898-00	s	RECEPTACLE
	1-509-910-00	s	HOUSING, CONNECTOR (2P)
	1-561-218-00	o	CONNECTOR SOCKET, 3P
	1-561-254-00	s	CONNECTOR CONTACT
S1002	1-553-789-00	s	SWITCH, SLIDE "TIMER"
S1004	1-516-781-XX	s	SLIDE "COLOR LOCK"
S1005	1-516-779-XX	s	SLIDE "TBC"

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

15-4. PACKING MATERIAL AND ACCESSORIES (SUPPLIED)

Parts No.	SP	Description
⚠1-556-760-11	s	CORD, POWER
3-662-364-00	s	BAG, PROTECTION
3-718-355-01	o	COVER, RF
3-718-359-01	o	CUSHION (UPPER)
3-718-360-01	o	CUSHION (LOWER)
3-718-361-01	o	INDIVIDUAL CARTON
⚠3-769-146-11	s	MANUAL, INSTRUCTION

15-5. FIXTURE

Parts No.	SP	Description
J-6001-820-A	s	DRUM ECCENTRICITY GAUGE (3)
J-6001-830-A	s	DRUM ECCENTRICITY GAUGE (2)
J-6001-840-A	s	DRUM ECCENTRICITY GAUGE (1)
J-6001-930-A	s	DRUM ECCENTRICITY GAUGE (4)
J-6009-830-A	s	FLATNESS PLATE
J-6026-240-A	s	ADJUSTMENT DRIVER
J-6130-010-A	s	REEL TABLE HEIGHT CHECK BASE JIG
J-6130-020-A	s	REEL TABLE HEIGHT CHECK JIG
J-6153-020-A	s	DIHEDRAL ADJUSTMENT DRIVER
J-6150-140-A	s	ECCENTRICITY SCTEWDRIVER 6 MM DIA.
J-6153-580-A	s	PINCH LEVER ADJUSTMENT JIG
Y-2031-001-0	s	CLEANING FLUID
2-034-697-00	s	CLEANING PIECE
3-702-216-01	s	BACK TENSION ADJUSTMENT JIG
7-661-018-01	s	SONY OIL
7-732-050-20	s	TENISON SCALE (50g full scale)
7-732-050-30	s	TENSION SCALE (100g full scale)
7-732-050-40	s	TENSION SCALE (200g full scale)
7-732-050-50	s	TENSION SCALE (500g full scale)
8-899-999-53	s	TORQUE MEASUREMENT TAPE
8-960-020-62	s	ALIGNMENT TAPE RR5-2SB PAL
8-960-035-61	s	ALIGNMENT TAPE RR5-2SC PAL
8-960-036-02	s	ALIGNMENT TAPE RR2-1SD PAL
8-960-036-80	s	ALIGNMENT TAPE RR5-1SD PAL
9-911-053-00	s	THICKNESS GAUGE

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

U-matic SP

VIDEOCASSETTE RECORDER

VO-9600P

VOL-2

SUPPLEMENT-1

Please file this SUPPLEMENT to your MANUAL

VO-9600P(EK)
9-966-927-81

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VO-9600P (EK)
9-966-927-22 VOLUME-2

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U-matic SP

VIDEOCASSETTE RECORDER

VO-9600P

VOL-2

SUPPLEMENT-1

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CONTENTS;
CO-7 and VO-17 boards' soldering side patterns are added.

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